

9-2013

The Economics of Same-Sex Couple Households: Essays on Work, Wages, and Poverty

Alyssa Schneebaum

University of Massachusetts Amherst, alyssa.schneebaum@uamass.edu

Follow this and additional works at: https://scholarworks.umass.edu/open_access_dissertations

Part of the [Business Commons](#), and the [Labor Economics Commons](#)

Recommended Citation

Schneebaum, Alyssa, "The Economics of Same-Sex Couple Households: Essays on Work, Wages, and Poverty" (2013). *Open Access Dissertations*. 818.

<https://doi.org/10.7275/aan3-2p77> https://scholarworks.umass.edu/open_access_dissertations/818

This Open Access Dissertation is brought to you for free and open access by ScholarWorks@UMass Amherst. It has been accepted for inclusion in Open Access Dissertations by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.

The Economics of Same-Sex Couple Households:
Essays on Work, Wages, and Poverty

A Dissertation Presented

by

ALYSSA SCHNEEBAUM

Submitted to the Graduate School of the
University of Massachusetts-Amherst in partial fulfillment
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

September 2013

Economics

The Economics of Same-Sex Couple Households:
Essays on Work, Wages, and Poverty

A Dissertation Presented
by
ALYSSA SCHNEEBAUM

Approved as to style and content by:

M. V. Lee Badgett, Chair

Nancy Folbre, Member

Ann Ferguson, Member

Michael Ash, Department Head
Economics

DEDICATION

In loving and grateful memory of Fran McDaniel

ACKNOWLEDGEMENTS

I have a great dissertation committee. For me, there could never have been a more supportive and helpful group of scholars to guide me through this stage of my life and career. The women on my dissertation committee have been my professors, my role models, and my mentors, and they have each fulfilled all of these roles admirably. They have not only helped me directly in my academic pursuits, but have also improved many aspects of the world in which we live through their truly outstanding contributions to academia and social justice movements.

I am grateful for my colleagues in the Economics Graduate Student Organization at UMass, who have provided a supportive, well-organized, and fun environment for graduate studies, and with whom I have had many interesting and useful conversations.

Many professors have inspired and guided me along the way to (starting and) completing this dissertation; I am truly grateful for the many excellent teachers in my life. Here I would like to especially acknowledge and thank three outstanding teachers and professors who inspired me to want to pursue academic work, and who have helped prepare me to be able to do so: Nina Banks, Michael Brent, and Coralynn Davis.

I am deeply grateful to my friends and family who have encouraged me throughout this project and have been at my side through all the ups and downs of life. My parents have loved me with all of their hearts – the best gift a person can receive, and one that has been the backbone for many of my pursuits. My friends fill up and enrich all aspects of my life, and provide love, support, and joy. My partner betters my work, and my life, on a daily basis. I thank you all.

ABSTRACT

THE ECONOMICS OF SAME-SEX COUPLES HOUSEHOLDS: ESSAYS ON WORK, WAGES, AND POVERTY

SEPTEMBER 2013

ALYSSA SCHNEEBAUM, B.A., BUCKNELL UNIVERSITY

M.A., UNIVERSITY OF MASSACHUSETTS-AMHERST

Ph. D., UNIVERSITY OF MASSACHUSETTS-AMHERST

Directed by: Professor M. V. Lee Badgett

Since Badgett's (1995a) landmark study on the wage effects of sexual orientation, interest in and production of scholarly work addressing the economics of sexual orientation has grown tremendously. Curious puzzles have emerged in the literature on the economics of same-sex couple households, three of which are addressed in detail in this dissertation.

Most studies of the wages of women in same-sex couples versus different-sex couples find that the former earn more, even controlling for differences in present labor market supply, education, experience, area of residence, and occupation. However, most previous studies of the sexual orientation wage gap omit the role of motherhood in the lesbian-straight women wage gap, and most take the sample of lesbians to be a homogenous group compared to straight women. Chapter 1 uses American Community Survey data from 2010 to study the wage gap between lesbians and straight women, putting motherhood in intra-household differences at the center of the analysis. The analysis shows that in terms of earnings, lesbian couples are quite heterogeneous; one partner has a large wage premium over straight women, and the other faces a large wage

penalty. These findings are enhanced when a child is present in the lesbians' home, possibly suggesting a household division of labor in lesbian homes.

Chapter 2 considers the possibility that same-sex couples, like many different-sex couples, have one person who specializes in paid work while the other specializes in unpaid work for the household, such as housework and childcare. Chapter 2 presents a study which uses American Time Use Survey Data pooled from 2003-2011 to analyze the time spent in household, care, and paid work for members of different couple types and finds that in same-sex as well as different-sex couple households, some personal characteristics, such as being the lower earner in the household, are correlated with spending more time in household and care work.

Chapter 3 offers a study of poverty in same-sex versus different-sex couple households, exploring which characteristics are correlated with poverty for same-sex and different-sex couple households. When controlling for a couple's education level, area of residence, race and ethnicity, age, and household composition, same-sex couples are more likely to be in poverty than their different-sex counterparts.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS.....	v
ABSTRACT.....	vi
LIST OF TABLES.....	viii
LIST OF FIGURES.....	ix
INTRODUCTION.....	1
 CHAPTER	
1. MOTHERHOOD AND THE LESBIAN WAGE PREMIUM.....	7
Introduction.....	7
The “Lesbian Wage Premium”.....	9
Data and Methods to Study the Sexual Orientation Wage Gap.....	15
Empirical Results.....	24
Discussion and Conclusions.....	33
2. THE HOUSEHOLD DIVISION OF LABOR IN SAME-SEX COUPLES.....	42
Introduction.....	42
Theoretical Background.....	43
Review of Existing Empirical Literature.....	52
Data and Methods.....	60
Multivariate Results.....	72
Discussion and Conclusions.....	78
3. POVERTY IN LESBIAN AND GAY COUPLE HOUSEHOLDS	86
Introduction.....	86
The Determinants of Poverty.....	87

Measuring Poverty.....	92
Multivariate analysis methods.....	99
Results: Explaining the sexual orientation gap in poverty rates.....	101
Discussion and Conclusions.....	106
APPENDICES	
A. APPENDIX TABLES AND FIGURES FOR CHAPTER 1.....	121
B. APPENDIX TABLES FOR CHAPTER 2.....	126
BIBLIOGRAPHY.....	130

LIST OF TABLES

Table	Page
1.1. Means for variables of interest, by sexual orientation and family status.....	35
1.2. OLS predicting log hourly wages with earner classification of primary/secondary, lesbians versus straight married women.....	36
1.3. OLS predicting log hourly wages with earner classification of primary/secondary, lesbians versus straight unmarried women.....	37
1.4. Separate OLS regressions by household type.....	38
1.5. Oaxaca-Blinder Decomposition for lesbian versus straight married and unmarried log hourly wages	39
2.1. Descriptive Statistics for Couples in ATUS, 2003-2011	80
2.2. Mean Number of Minutes Spent in Different Types of Work, Within Various Couple Types.....	81
2.3. Predicting Minutes Spent in Paid Work.....	82
2.4. Predicting Minutes Spent in Housework.....	83
2.5. Predicting Minutes Spent in Care Work.....	84
2.6. Predicting Minutes Spent in Supervisory Care Work.....	85
3.1. Household Poverty Rates and Descriptive Statistics by Household Type.....	108
3.2. Poverty Rates by Household Type and Couple Characteristics.....	112
3.3. Probit regression predicting being in poverty; marginal effects at mean.....	116
3.4. Oaxaca-Blinder decomposition for poverty rates, gay versus straight.....	119
3.5. Oaxaca-Blinder decomposition for poverty rates, lesbian versus straight.....	120
A1. Means of occupational categories by sexual orientation and family status.....	121
A2. OLS predicting log hourly wages with household roster classification of primary/secondary, lesbians versus straight married women.....	122

A3. OLS predicting log hourly wages with household roster classification of primary/secondary, lesbians versus straight unmarried women.....	123
B1. Predicting Minutes Spent in Different Work for Different-Sex Couples.....	127
B2. Access to same-sex marriage or a marriage-like institution for same-sex couples, by state.....	128
B3. Minutes Spend Caring for Household Children versus Household Adults.....	129

LIST OF FIGURES

Figure	Page
1. DFL comparing lesbians and straight married women.....	40
2. DFL comparing lesbians and straight unmarried women.....	41
A1. DFL analysis with IPUMS definition of mother: lesbian versus straight married women.....	124
A2. DFL analysis with IPUMS definition of mother: lesbian versus straight unmarried women.....	125

INTRODUCTION

This dissertation consists of three essays addressing issues in the economics of same-sex couple households. The research on sexual orientation in the economics literature is sparse relative to the amount of work analyzing the economic position of other minority groups. Marieka Klawitter supposes a lack of research on sexual orientation in economics is due to “discrimination against sexual minorities, the lack of interest and knowledge about sexual orientation, the absence of support for this research, and the scarcity of appropriate models and data” (1998, p. 55). Badgett (1995b) also points out that economists cannot impose an analysis of lesbian, gay, and bisexual (LGB) people onto existing models that are based on heterosexual families, asserting that we need to create new methods to get a picture of how sexual orientation matters in economics.

In spite of these challenges, there has been a strong emergence of studies looking at issues of sexual orientation since Badgett’s (1995a) landmark study looking at the wage effects of sexual orientation. Since then, there have been dozens of empirical papers studying the effect of sexual orientation on wage and employment outcomes. The top-ranked *Journal of Economic Perspectives*, for example, has included an article on the economics of gay and lesbian families (Black *et al.* 2007). Political advancements and social movements in the area of LGB life are making research increasingly possible because more LGB people are “out,” or open about their sexual orientation; there are more data available; and more organizations are funding research in this area.

Despite this recent growth in interest and support for research on this sexual orientation in economics, the field still contains many unanswered questions. A major

barrier to studying the economic lives of LGB people remains: there is a serious data constraint on researchers to find large-scale, representative data. While smaller data sets which come from surveys such as the General Social Survey or the California Health Interview Survey that ask respondents about their sexual behavior do exist, the best data for economists studying sexual orientation come from the decennial US Censuses in 1990 and 2000 and American Community Surveys. The Current Population Survey, which is linked to the American Time Use Survey, is also a good source of data for answering questions regarding sexual orientation. In those surveys, however, there are no questions about sexual orientation; researchers can only identify households in which the householder is in a same-sex couple.¹ As this dissertation addresses questions regarding the economics of same-sex couples, the data constraint problem is less of an issue.

The three research questions on the economics of same-sex couple households addressed in this dissertation are as follows. In chapter 1, I address the curious puzzle that has emerged from studies examining the wage effects of sexual orientation for women. Although lesbian and bisexual women face discrimination in the labor market, most studies of the wages of female workers in same-sex couples versus in different-sex couples find that the lesbians earn more, even after controlling for differences in present labor market supply, education, years of experience, area of residence, and occupation. However, previous studies of the sexual orientation wage gap consistently omitted two important issues. First, although motherhood has been shown to play an important role in

¹ A note on semantics is in order. In this dissertation, I call members of same-sex couples “gay” or “lesbian.” While recognizing the differences between sexual behavior, identity, and attraction (cf. Laumann 1994), I simplify language use here and call women in same-sex couples “lesbians”; men in same-sex couples “gay”; and people in different-sex couples “straight” or “heterosexual,” although we do not know about their actual preferred identities.

determining women's wages, the role of motherhood in the straight-lesbian wage gap has not been adequately addressed. Second, previous studies have taken the sample of lesbians to be a homogenous group compared to straight women without considering the possibility that there is a "primary" and "secondary" group of earners among lesbians, as there is in different-sex couples.

Chapter 1 therefore tests for a wage gap between lesbians and straight women, giving particular attention to the role of motherhood and incorporating the possibility that in terms of wages, two distinct groups of lesbians exist. I employ 2010 American Community Survey to perform standard OLS wage regressions, a Oaxaca-Blinder decomposition to examine the role motherhood on the lesbian-straight wage gap at the mean, and a DiNardo-Fortin-Lemieux decomposition to do so at all points along the wage distribution. The results show that while motherhood is typically negatively correlated with wages for straight women, it is positively related to wages for the group of lesbians as a whole. However, the positive relationship between earnings and wages holds only for primary lesbian partners; the relationship between motherhood and wages is negative for the secondary partners. The differing effect of motherhood for the two groups of lesbians may be an indication that lesbian couples engage in some degree of specialization, implying that some lesbians behave more like "mothers" and some more like "fathers". Furthermore, there is overall a strong lesbian wage premium for the primary lesbians, but a wage penalty for secondary lesbians. The work presented in chapter 1 therefore addresses intra-household wage inequality in same-sex female couples.

Following from this point, the work in chapter 2 explicitly addresses the possibility that there is a household division of labor into paid and unpaid work in same-sex couples. In most different-sex couples, the man in the couple spends more minutes per day than the woman in paid work, while the woman spends more time than the man in unpaid household work, care work, and supervisory care work. Chapter 2 considers the possibility that the specialization in paid versus unpaid work can be based on personal characteristics of people in a couple other than their gender. I consider the time spent in the four different types of work for people in same-sex couples as well as different-sex couples. I use American Time Use Survey Data pooled from 2003-2011 to analyze the time spent in household, care, and paid work for members of different couple types, finding some evidence that one member of the couple specializes in one of these tasks while the other couple member specializes in another. The race, ethnicity, and earnings of the people in same-sex couples play a role in determining the tasks performed by the two partners. Furthermore, the relationship between intra-couple income differences and a couple member's time spent in the various tasks is stronger for same-sex couples who live in a state with access to marriage or a marriage-like institution than for those who do not, suggesting that marriage is related to a same-sex couple's labor choices.

The lack of ubiquitous access to same-sex marriage therefore makes a difference in the economic lives of same-sex couples. There may be other economic consequences of unequal treatment of same-sex couples, as well. In chapter 3, I study poverty in same-sex couples. Poverty is one of the most widely researched topics in economics, but very little is known about poverty in same-sex couple households. The work in chapter 3 uses data from the 2010 American Community Survey to estimate poverty rates for four

different household types: those in which the householder is in a different-sex married couple, a different-sex unmarried couple, a same-sex male couple, and or same-sex female couple. The study presents a probit model to test the households' relative probability of being in poverty while holding many factors constant. Further, I show a decomposition of the probability of being in poverty into the characteristics in different households versus the returns to those characteristics, which can differ by household type. Comparing households with similar characteristics, female same-sex couple households are more likely to be in poverty than different-sex married couple households. Lesbian couples experience lower returns to characteristics which typically help couples escape from poverty, meaning that lesbians are at an economic disadvantage despite their over-investment in education and high labor force participation rates.

This dissertation sheds light on the wages, the working decisions, and the extent of poverty in same-sex couple households. Taken together, the three papers in this dissertation address many important aspects of the economic lives of same-sex couples. First, an important result from chapters 1 and 2 is that there is intra-household income inequality in same-sex couples; the two people in a same-sex couple can have different working patterns, earn different wages, and the effect of children can be different for each of them. Second, broader institutional structures – in particular, inequality under the law – affect the economic situation of same-sex couples, as shown in chapters 2 and 3. A lack of access to federal same-sex marriage and anti-discrimination in employment, for example, can contribute to different working choices of same-sex couples and put them at a greater risk of poverty. Finally, the results from chapters 1 and 3 show that female same-sex couples are at a strong economic disadvantage compared to different-sex

couples. Even when one lesbian partner earns more than her partner and more than straight women, on average, the couple together is most likely to be in poverty out of all couple types. Inequality in wages, work, and poverty is therefore a complex phenomenon, both within households and across households. This dissertation informs the role of sexual orientation in this discussion.

CHAPTER 1

MOTHERHOOD AND THE LESBIAN WAGE PREMIUM

Introduction

It is a common empirical finding that in the US, female full-time workers in same-sex couples earn higher wages than those in different-sex couples, even controlling for differences in present labor market supply, education, years of working experience, area of residence, and occupation (Klawitter 2012). Despite the growing amount of literature on the topic since Badgett's (1995) seminal paper, there are two critical components to the study of the lesbian-straight wage gap that have been left out of almost all analyses on the subject. First, the role of motherhood² in the wages of lesbians versus straight women has been absent from the literature in all but two recent papers. Second, the possibility that there is a "primary" and "secondary" lesbian earner within each couple – where the primary (secondary) partner is the higher (lower) earner in her own couple, or the householder (partner) on the household roster – has only come up in one study, which looks at labor supply, not wages. This paper addresses both of these omissions from the sexual orientation wage gap literature.

Only one paper has looked explicitly at the relationship between motherhood and wages for lesbians (Baumle 2009), finding that there is a positive relationship between motherhood (which Baumle defines as living in a household with any children) and wages for lesbians working full-time, net of differences in experience, education, race, ethnicity, fluency in English, and metropolitan status. This positive relationship between

² In this study, I use two alternative definitions of "mother". The first is for a woman living in a household with a related child, and the second is being considered a "probable" mother in the IPUMS data. More detail is below.

motherhood and wages for lesbians explains about 35 percent of what has been called the “lesbian wage premium” – the remaining positive wage gap of lesbians’ earnings over straight women’s earnings once controlling for observable characteristics. An earlier study by Jepsen (2007) finds that a wage premium exists for full-time working lesbians compared to straight women in households both with and without children, even controlling for experience, industry, occupation, race, education, metropolitan status, disability status, and proficiency with the English language, although the study does not look explicitly at the relationship between children and wages for lesbians (via an interaction term between being a lesbian and a mother in the OLS model, for example). The present study builds upon Jepsen’s (2007) and Baumle’s (2009) work by not just analyzing a newer sample of women in the US with more informative econometric techniques, but by addressing the possibility that the effect of motherhood on wages is different for lesbians playing different roles in the parenting division of labor.

The second part of the analysis directly follows this point. This is the first paper in the literature on the sexual orientation wage gap to consider the possibility that there are primary and secondary earners within each lesbian couple – meaning that we should compare these groups to straight women separately to get a more complete picture of the wages of coupled American lesbians. On this point I draw on the insights of Antecol & Steinberger (2011), as they show a labor supply gap within lesbian couples. As this paper is primarily concerned with addressing the wages of different groups of lesbians to those of straight women, I take the group of straight women to be a homogenous comparison group, although some straight women are “primary” partners in their

relationships in that they earn more than their male partners or consider themselves to be the head of their households.

Two key results emerge from the analysis. The first is that there is a positive relationship between motherhood and wages for the group of lesbians as a whole, compared to the negative relationship between motherhood and wages for straight women, even controlling for potential work experience (age minus years of education minus five)³ and present labor supply. A second important finding is that the effect of being a mother on wages is quite different for primary lesbian partners and secondary lesbian partners. Motherhood is negatively correlated with wages for the secondary lesbian partner, but strongly positively correlated with wages for the primary partner. More generally, there is a wage premium over straight women for the group of primary lesbians, but a lesbian wage *penalty* for the group of secondary lesbians.

The “Lesbian Wage Premium”

Empirical studies of the wages of lesbians versus straight women consistently find that there is an unconditional wage gap between lesbians and straight women, in which lesbians earn more. Once controlling for differences in education, experience, location, and occupation, either there is no significant difference between the women’s wages (Badgett 1995; Klawitter & Flatt 1998; Carpenter 2005 in California), or lesbians receive higher wages than straight women (Badgett 2001; Clain & Leppel 2001, Berg & Lien 2002; Black *et al.* 2003; Blandford 2003; Jepson 2007; Antecol *et al.* 2008; Baumle *et al.*

³ In the data set I employ here, we cannot measure actual working experience. This omission is likely to bias the estimates of the motherhood penalty upwards, because actual labor market experience has a strong(positive) impact on earnings and is strongly (negatively) affected by motherhood.

2009; Cushing-Daniels & Yeung 2009) – a “lesbian wage premium.” Peplau & Fingerhut (2004) call the lesbian premium a “paradox”: we might expect lesbians to earn less than similarly situated straight women due to labor market discrimination based on sexual orientation (cf. Badgett 1995; Weichselbaumer 2003; Elmslie & Tebaldi 2007), but instead we see that lesbian workers earn more.

As with any wage gap question, there are observable and unobservable characteristics that help explain the unconditional wage difference between lesbians and straight women. Two explanations for lesbians’ higher unconditional earnings are based on unobservable demand-side issues. The first is that employers might engage in statistical discrimination against straight women compared to lesbians. If employers expect that straight women are more likely to leave their job or make less of a workplace commitment because of family responsibilities, employers would prefer lesbians to equally qualified straight women. In other words, discrimination against straight women can benefit lesbians. Second, employers may prefer lesbian to straight employees because lesbians might display and/or their employers expect them to display more masculine characteristics, such as assertiveness, dominance, autonomy, competence, and detachment – characteristics more preferable in the competitive labor market (Clain & Leppel 2001; Peplau & Fingerhut 2004; Jepsen 2007). Furthermore, similar stereotypes may affect lesbian and straight mothers differently. Peplau & Fingerhut (2004) conducted an experiment of 162 undergraduate students, finding that the students considered straight mothers less competent and less committed to their job than non-mothers, but did not pass the same judgment on lesbian mothers. These stereotypes and prejudices, however

problematic, benefit lesbians' pay in the labor market – they are an instance of what some would call “positive discrimination.”

While employers might have expectations that benefit lesbians' wages, there are three observable supply-side effects that may contribute to the unconditional lesbian-straight wage gap. First, lesbians' preferences for and access to occupation and industry of employment may be different than straight women's. Controlling for occupation and industry reduces the lesbian earnings advantage; the relatively high number of lesbians in male-dominated occupations helps to push lesbians' wages higher (Blandford 2003; Black *et al.* 2007a; Baumle *et al.* 2009). It might be a matter of worker preference or opportunity, but there are more lesbians in higher-paid “male jobs” than straight women (see Badgett & King 1997 for a discussion of lesbian occupational choice). An empirical test of the relative importance of occupation sorting in explaining the lesbian wage premium using 2000 US Census data, however, finds that the effect of different occupational choice on women's wages does not make a significant difference between the wages of lesbians and married straight women, especially at the lower end of the earnings distribution (Antecol *et al.* 2008).

A second labor supply issue explaining the lesbians' higher earnings is that lesbians have much higher levels of human capital than straight women, particularly in educational attainment. Partly to counteract the negative income effect of pairing with another woman (Badgett 2001; Berg & Lein 2002; Black *et al.* 2003) and partly because of the longer opportunity to pursue her education without getting sidetracked by marriage and family responsibilities (Daneshvary *et al.* 2009), lesbians have and enjoy the benefits of higher levels of education. Antecol *et al.* (2008) show that combining the effects of

occupational sorting and differences in educational attainment can explain between half and three-quarters of the lesbian wage premium, most of which is due to differences in education; including experience explains even more of the wage gap. They find this to be particularly true at the higher end of the earnings spectrum: occupational sorting and especially educational differences explain most of the unconditional lesbian wage advantage for women in the top three income deciles (p. 538, Figure 4).

A fifth explanation for lesbians' higher unconditional earnings has to do with lesbians' higher labor force attachment. It could simply be the case that lesbians earn more because they work more, both presently and over time in the past. Cushing-Daniels & Yeung (2009) find support for the idea that lesbians' higher unconditional earnings are due in part to differences in labor supply: using General Social Survey data from 1988-2006, they show that controlling for the selection into full-time work via a Heckman two-stage selection model eliminates the gap between the wages of lesbians and straight women.

Although the relationship between labor supply and wages for lesbians is only first starting to be addressed in the literature, we do know that lesbians as a whole do supply much more paid labor than their straight counterparts (Black *et al.* 2007a; Antecol & Steinberger 2011). There are several explanations for lesbians' stronger labor force attachment and higher levels of labor supply. A rational expectations model to account for the choices of female workers, as shown by Badgett (1995), Berg & Lien (2002), Clain & Leppel (2002), and Black *et al.* (2003), posits that lesbians, knowing they are or will be partnered with another woman who also faces a gender-based wage disadvantage, invest more in their human capital and spend more time in the labor force to make up for

the lost household income of pairing two women instead of a woman with a higher-earning man. Lesbians, the theory goes, work for pay more to make up for the economic cost of being a lesbian. A second explanation is that institutional constraints, such as the lack of federal employment non-discrimination protection, encourage lesbians to hold on tightly to their jobs once they have them. It could also be the case that lesbians receive less support from their family members and therefore need to work more for pay to ensure their own financial security (Badgett 2001; Giddings 2003).

Building on the work of Leppel (2008) and Tebaldi & Elmslie (2006), Antecol & Steinberger (2011) analyzed the labor supply of lesbian versus straight women using 2000 US Census data, concentrating on the role of children in explaining the sexual orientation labor supply gap. As a whole, lesbians supply much more labor than straight women at both the extensive margin (the decision to participate in the labor market at all) and the intensive margin (the number of hours worked, conditional on supplying some positive number of hours of labor). Importantly, Antecol & Steinberger divide their sample into primary (higher) earner lesbians and secondary (lower) earner lesbians, and find that not only do the primary partners provide more labor than the secondary partners (who still provide more labor than straight women), but further that motherhood has less of an effect on the labor supply of lesbians than straight women and less on the labor supply of primary lesbians than on secondary lesbians. Children account for a much larger portion of the mean labor supply gap between (straight) married women and secondary lesbian earners (56%) than between (straight) married women and primary lesbian earners (15%); straight women's labor supply is more similar to one group of lesbians (the secondary earners) than another (the primary earners). A parallel story

emerges when the sample of lesbians is split into the primary and secondary group using a definition of primary and secondary based on the household roster – the householder (or first person listed on the survey) is the primary partner, while her “unmarried partner” is the secondary partner. Motherhood has a very different effect on the labor supplies of primary versus secondary lesbians, wherein the secondary lesbians respond to children being present in the household in a manner much more similar to straight married women than the primary lesbians (whose labor market supply looks much more like married men’s). These findings suggest that not only might lesbian couples engage in some degree of household specialization, but that given the relationship between labor supply and wages, we might expect the wages of the two groups of lesbians to be different as well.

Furthermore there is reason to believe that motherhood might even be *positively* correlated with wages for lesbians – or at least, for the primary lesbians. If it is the presence of children which drives specialization in a couple (as purported by Becker, 1981; 1991) and this is also true in lesbian couples (as the research by Giddings *et al.* 2012 shows to be the case), then a lesbian couple having children would mean that one of the lesbians would be specializing in paid work while her partner does paid work only part-time or not at all, allowing the primary lesbian to allocate more energy (Becker 1985) and time to her paid work, potentially resulting in a positive effect on her wages. Therefore motherhood may be positively correlated with wages for the primary group of lesbians, but perhaps negatively correlated with wages for the secondary group.

Another reason to expect a positive relationship between motherhood and wages for (some) lesbians is that there could be a selection bias for higher-earning lesbians into

motherhood. It could be the case that higher-income lesbian couples are more likely to be mothers than relatively lower income straight couples (since conception of a child is, on average, more expensive for lesbian couples, and because higher earners are more likely to be able to keep custody of children from previous relationships) (Clain & Leppel 2001). On the other hand, many lesbian mothers have children from previous heterosexual relationships, and lesbians who were previously married (to a man) earn less than never married lesbians (Daneshvary *et al.* 2009). Therefore it is not clear if we should expect a selection bias into motherhood for high earning lesbians.

Overall, the existing knowledge on the wages of lesbians in the US leads to the prediction that the effect of motherhood on wages is at least less negative for some lesbians compared to straight women and potentially positive for others. Further, given differences in the labor supplies of the two groups of lesbians (Antecol & Steinberger 2011), we could suspect that the two groups are different in terms of their wages, as well. The next section describes the data and methods used to test these hypotheses.

Data and Models to Study the Sexual Orientation Wage Gap

I use the Integrated Public Use Microdata Series (IPUMS) sample of the American Community Survey (ACS) data from 2010 for this analysis (Ruggles *et al.* 2010). The ACS is a nationally representative survey of over one million households per year and is close to ideal for this study, because it provides extensive information on labor market outcomes such as annual earnings and time (hours and weeks) worked, as well as an abundance of demographic information such as age, race, education, and location. While the ACS does not ask direct questions about sexual orientation, the

demographic information provided by the survey allows for the identification of people in same-sex and different-sex couples: each household has a “householder”, and this householder states their relationship to every other person in the household. One of the relationship choices is “unmarried partner” and I identify any woman with a female “unmarried partner” as a lesbian. In order to reduce the probability of having the sample of same-sex couples contaminated by miscoded different-sex couples, I follow the suggestions of Black *et al.* (2007b) and Gates & Steinberger (2008) and drop any observation for which the householder or the householder’s spouse or partner has imputed values for his/her marital status and who mailed in their completed survey (see Gates & Steinberger 2008 for details on coding errors in the 2000 Census, which also applies to subsequent ACS data). This restriction reduces the amount of same-sex couples in our sample by about 20 percent, but it substantially reduces the chance of miscoding straight couples as same-sex couples.

There are three important drawbacks to our identification of “lesbians” in the ACS. The first is that the sexual orientation of single people is unidentifiable, because we construct categories of sexual orientation based on the gender composition of one's relationship. Therefore, we can only study lesbians who are in a couple.⁴ Secondly, we can only identify lesbians in a particular type of couple: the householder and her partner. Because we only know the detailed relationship of each person in the household to the householder, we cannot know if there are couples in the household other than the primary couple. This means that a couple living in someone else’s household – one of their parents’ homes, or with friends, for example – is not identifiable as a couple in these data,

⁴ While it is feasible that selection into partnership is correlated with wages and would therefore provide a biased sample (as Carpenter & Gates 2008 show is true of gay men and lesbians in California), it is not clear that the selection into partnership would be different for lesbians and straight women.

and therefore their sexual orientation is unknown. Third, many people are unlikely to use the expression “unmarried partner”, either because they do not understand it, or because they instead think of their partners as “boyfriends” or “girlfriends” – a less formal term than “unmarried partner”. Indeed, Badgett & Schneebaum (2008) find that in 2007 Current Population Survey, there are about forty percent more same-sex couples when the respondents are asked about their cohabiting “boyfriend/girlfriend”, instead of an “unmarried partner”. Despite the drawbacks of who is included and excluded in our sample, the ACS is a very good dataset for this analysis because of its large sample size, representativeness, and abundance of demographic and economic information.

I compare the wages of lesbians to straight married and cohabiting but unmarried women. I use both married and unmarried women in my sample of straight coupled women because it is not clear whether lesbian couples are more like married or unmarried straight women. The choice to get married can be correlated with unobservable characteristics, such as one’s level of happiness (cf. Stutzer & Frey 2005), which may be related to workplace outcomes. Because some lesbians would get married if they had the legal choice while others would choose to stay unmarried, I compare the group of lesbians to both the married and unmarried straight women to account for the possible unobservable similarities between lesbians and either group of straight women – although we cannot know from these data which of the lesbians would get married if they could.

For the first OLS analysis and the DFL analysis described below, I split the sample of lesbians into primary and secondary partners in the same way as Antecol & Steinberger (2011), mentioned above. In the “earner” primary/secondary classification, the higher earner in a lesbian couple is considered the primary partner, while the lower

earner is the secondary earner. (In the 71 cases where both partners earn the same amount, neither is designated primary or secondary.) In the “household roster” classification, the person named as the householder is the primary partner, and her “unmarried partner” is the secondary partner.

I identify a “mother” in two ways. The first definition of motherhood that I employ considers a woman in the household’s main couple a “mother” when there is a biological, adopted, step-, foster child, or child-in-law of the householder in the home, or a sibling, sibling-in-law, or other related (not specified) child under 18 in the household. In total, 28.2% of lesbians had this definition of motherhood applied to them. This is what I call the “related” classification for motherhood. The second classification, the “IPUMS” definition, gives any woman in a household’s main couple who IPUMS designated as having her own (probable) biological, adopted, or foster child in the home, the status of “mother.” Because the ACS data only gives the relationship of every person in the household’s relationship to the householder and not to everyone else, we cannot be sure of the exact relationship between the partner and any children in the household. The IPUMS data comes with a variable which identifies a “probable” mother, based on either a direct link between the householder and a person in the household she names as her child, or (for non-householders) the age difference between two people in the household (between 15 and 49 years), where the older person was ever-married, and the relationship to the householder of both of the people gives them a “plausible” mother-child connection. In lesbian couples, 27% of householders are given this motherhood status, while only 3% of the unmarried partners have it (see table 1.1).⁵

⁵ Of course not all women without a child in the home are non-mothers; they may have children who are living outside of the home. However, the existing literature on the motherhood penalty shows that the

The outcome variable is the log of hourly wages, which I calculate by dividing the respondents' annual earnings⁶ by how many hours they worked last year, which was calculated by multiplying the midpoint of the intervalled "weeks worked last year" variable by the respondent's usual hours worked per week. Incomes in the 99.5th percentile are top coded as the average of all incomes in the 99.5th percentile in the respondent's state. I limit my sample to women of typical working age, 18-64, who worked a positive number of hours in the last year and who earned more than \$2/hour and less than \$250/hour. I exclude any individuals with census bureau flagged value for any of the variables of interest from the sample. The sample comprises 276,246 married straight women with an average hourly wage of \$22.14; 31,963 unmarried straight women with an average hourly wage of \$16.57; and 3,152 lesbians with an average hourly wage of \$25.16.

To analyze the difference in the wages of lesbians and straight women, I employ three econometric techniques. First, I perform ordinary least squares (OLS) regressions of wages on education level, work experience⁷, race and ethnicity, region of residence and a dummy variable indicating residence in a city;⁸ 25 dummy variables indicating occupation; four dummy variables indicating whether the woman is a mother or not and the age of her youngest child (0-5; 6-12; 13-17; 18+); the usual hours worked per week; and a dummy indicating participation in a same-sex (lesbian) couple for primary and

penalty is based mainly on the mother's "responsibility" to take care of the young child and her resulting time out of the labor market, and the penalty is therefore largest when young children are present (e.g. Anderson *et al.* 2003).

⁶ More precisely, these earnings are all the wages, salaries, commissions, cash bonuses, tips, and other money income received from an employer over the last twelve months. Payments-in-kind or reimbursements for business expenses are not included.

⁷ Potential experience is calculated in the standard way: age-years of schooling-5.

⁸ A city is defined as a metropolitan area with at least 1 million people.

secondary lesbians⁹. In some specifications, the model is restricted to women working full-time (at least 39 hours per week) and the hours worked variable is excluded. The equation takes the form

$$Y_{is} = \alpha_s + \beta_s X_{is} + \varepsilon_{is} \quad (1.1)$$

where Y is the log hourly wages for person i of sexual orientation and marital status group s (either primary lesbian, secondary lesbian, straight unmarried, or straight married), β is a vector of coefficients on the observable characteristics X described above, and ε is an error term with the usual properties.

All but one (Antecol *et al.* 2008) study of the sexual orientation wage gap in the US use a dummy variable for sexual orientation (and straight women's marital status) to test the effect of sexual orientation on wages, and I follow this standard here.

Additionally, I run the regression for the entire group of lesbians and straight women separately, in order to check for different returns to motherhood by sexual orientation and family status group. In other words, I examine whether level of motherhood plays a different role in the wages of lesbians vis-à-vis married straight women. While some studies have done this for some variables predicting women's earnings (Badgett 1995 for work experience; Klawitter & Flatt 1998 for state and metropolitan status; Clain & Leppel 2001 for one region, one education level, one occupation; age; and presence of one's own child in the household; Elmslie & Tebaldi 2007 for race and metropolitan status; and Daneshvary *et al.* 2009 for previous marriage), only Antecol *et al.* (2008) have presented separate models looking at returns of all observable characteristics to

⁹ In the main analysis I present the results using the earner definition of primary/secondary, and the results with the household roster position definition of primary/secondary is used as a robustness check. Results are in the appendix.

wages. This strategy is particularly relevant in this study, because we are mainly interested in the varying effect of motherhood on wages for lesbians compared to straight women. The separate regressions are followed up with a Oaxaca-Blinder decomposition.

The Oaxaca-Blinder (Oaxaca 1973; Blinder 1973) technique decomposes the wage gap between lesbians and straight women (at the mean) into differences in observable characteristics and differences in returns to these characteristics. The decomposition allows us to see whether the wage gap is due to the fact that lesbians have different characteristics, or if they experience different returns to these characteristics. Intuitively, the process is asking what lesbians would earn if they faced the same returns to their observable characteristics as straight women. It can be modeled as

$$\bar{Y}_L - \bar{Y}_S = (\bar{X}^L - \bar{X}^S)\beta^S + \bar{X}^L(\beta^L - \beta^S) + (\alpha^L - \alpha^S) \quad (1.2)$$

for sexual orientation groups L (lesbian) and S (straight).

Finally, while the Oaxaca-Blinder technique provides us with much insight about the returns of various characteristics to lesbians and straight women, it only analyses the relative importance of these characteristics *at the mean* of the wage gap. It is feasible (and indeed shown by Antecol *et al.* 2008) that the sexual orientation wage gap differs along the earnings distribution. For example, Antecol *et al.* (2008) show that the lesbian wage premium is lower at the higher end of the earnings distribution – the difference between lesbian and straight women’s earnings is lower for high wage earners than for lower wage earners. We might expect that the effect of motherhood on lesbians’ wages would differ along the earnings distribution. As discussed above, Clain & Leppel (2001) posit that there can a selection bias into motherhood; women with higher earnings might be more likely to self-select into motherhood, and they are also more likely to retain

custody of children from prior relationships. If this is more true for lesbians than straight women, we could expect that the lesbian wage premium once controlling for motherhood would be higher at the higher end of the wage distribution. I test this possibility using a DiNardo-Fortin-Lemieux (DFL) (1996) decomposition, which allows us to see the impact of various characteristics on a wage gap between two groups at all points along the earnings distribution.

The DFL tool works by creating a counterfactual distribution of wages for lesbians as if they had the same distribution of observable characteristics as straight women. In other words, it allows us to model the distribution of wages that would prevail for lesbian workers if they had the distribution of characteristics for straight women. One creates this counterfactual distribution by reweighting the lesbian observations by

$$\psi(X) = \frac{dF_{X_S}(X)}{dF_{X_L}(X)}$$

or equivalently,

$$\psi(X) = \frac{\Pr(D_S=1|X)/\Pr(D_S=1)}{\Pr(D_S=0|X)/\Pr(D_S=0)} \quad (1.3)$$

which can be easily computed by estimating a probability model (via logit, for example) to predict $\Pr(D_S = 1|X)$ (the probability of being straight given the characteristics in X) and $\Pr(D_S = 0|X)$ (the probability of being a lesbian, given X), and using the predicted probabilities to compute a value for $\psi(X)$ for each lesbian observation (Fortin *et al.* 2010).

Once the lesbian observations are weighted using the covariates of interest, any difference left between the wages of lesbians and straight women is unexplained by the observable characteristics included in constructing the counterfactual distribution of lesbians' wages, and any remaining difference between the wages of straight women and the counterfactual wages of lesbians can be understood as the effect of being a lesbian.

There is some concern about the order in which covariates are introduced into the weighting scheme in the DFL approach. The concern first introduced in DFL (1996) and in several applications of the technique thereafter (including e.g. Antecol *et al.* 2008) arises when creating the reweighting measure $\psi(X)$ by sequentially adding covariates, e.g. starting with $\Pr(D_S = 1|X_1)$, computing $\psi_1(X_1)$ and the counterfactual distribution of wages for lesbians based only on X_1 , then doing the same with $\Pr(D_S = 1|X_1, X_2)$, and so on. The problem with this approach is that it ignores any relationship between covariates introduced earlier with those which come later, despite the fact that there may be an economic interpretation for their relationship. For example, estimating the effect of region without controlling for other covariates, such as residence in a city, might be overstated if people in one region tend to be concentrated into cities, where wages are higher than in rural areas. The problem of sequentially adding covariates, then, can be understood as an omitted variable problem, because estimates based on the first few covariates leave out the relevance of the covariates which are introduced later (Gelbach 2009).

Fortin *et al.* (2010) suggest an alternative approach, appropriate mainly for studying the effect of *one* variable of interest – perfect in our case, where we are concerned with understanding the effect of motherhood on the lesbian wage premium (Fortin *et al.* 2010, pp. 80-2). In this approach, I first calculate the reweighting factor using all covariates, $\psi(X)$. For covariate of interest k , in this case motherhood, I then calculate the reweighting factor using all covariates except k , $\psi_{X-k}(X_{-k})$. Finally, I compute the counterfactual distribution of wages using the ratio of the reweighting factors $\frac{\psi_X}{\psi_{X-k}(X_{-k})}$ as a weight, and compare this weighted distribution to the

counterfactual obtained using only ψ_X as a weight. The difference in the two is the estimated contribution of covariate k (motherhood) to the composite effect of the covariates in the lesbian versus straight wage distribution.

Empirical Results

What contributes to the difference in the wages of straight women and lesbians as a group? I test the relative importance of differences in occupation, educational attainment, work experience, location, race and ethnicity, hours worked, and motherhood status on lesbian versus straight women's wages. The means for log hourly wages and all independent variables by sexual orientation and family status (married or unmarried) are shown in Table 1.1.

In an unconditional comparison of wages, lesbians as a whole (column 3) clearly earn more than straight women, but the gap is much larger between lesbians and unmarried straight women (43.9%) than between lesbians and married straight women (10.4%).¹⁰ Once we divide the group of lesbians in primary and secondary groups, though, we see a more nuanced story. The primary lesbian earners (column 4) earn 58.7% more than married straight women, while the secondary lesbian earners (column 5) make 15.3% *less* than straight married women. Using the household roster definition of primary and secondary does not show the same contrast; both groups earn more than straight women.

Lesbians as a whole work significantly more hours per week than straight married and unmarried women (40.7 versus 37.1 and 37.8, respectively) and more weeks per year.

¹⁰ Throughout the paper, the log differences in outcomes are converted to percentage terms using the equation where Δ is the log difference between the lesbian and straight outcomes.

Both primary and secondary lesbians work more than straight women, but there is a statistically significant (though small) difference in the weeks worked by primary and secondary (using the earner definition) lesbians. Using the “related” definition of motherhood, we see that a much lower percentage of lesbians have children (28 percent compared to 69 percent of straight married women and 42 percent of straight unmarried women). The IPUMS definition of motherhood yields much lower rates of “motherhood.” Lesbians are more likely to have professional degrees than married straight women (6.8% versus 3.7%) and much more likely to have these degrees than unmarried straight women (1.7%), and there is a lower percentage of Hispanic lesbians (10.0%) than in any other sexual orientation and marital status group (10.8% of straight married; 15.5% of straight unmarried). These differences help explain lesbians’ higher earnings in unconditional comparisons. Primary lesbian earners are also more highly educated and more of them are white and non-Hispanic, compared to their lower-earning partners.

The results of the OLS regressions of equation (1) are presented in Tables 1.2-1.4. The first column of Table 1.2 shows the effect of sexual orientation (divided by primary and secondary earners) and motherhood status on hourly wages for the complete sample of lesbians and married straight women.¹¹ The third column does the same but only for the sample of full time workers (those who usually work at least 39 hours per week), representing the form of regression that has often been presented in the literature as predicting the effect of sexual orientation on wages for women. Columns 2 and 4 add the effect of motherhood on both the straight women and the primary and secondary lesbians

¹¹ Estimates for the relationship between education level, experience, region, metropolitan status, race and ethnicity were included in the model, but results are not reported here. They are available upon request.

to the analysis, where motherhood is captured in dummy variables indicating whether the woman is a mother and the age of her youngest child. For the sample of all women (those who work any number of positive hours, not just full time), I add a control for the usual number of hours worked per week simultaneously with the dummy variables for motherhood, as theory predicts that these effects work together. All of the models control for potential past work experience flexibly, using four terms for it, but aside from the sample of full-time workers, I only control for current participation in the labor market once accounting for motherhood status (column 2), because motherhood and labor market supply are jointly determined for women.

First comparing column 3 to the existing literature makes the first important point in this analysis.¹² Although most studies have found a positive relationship between wages and participation in a lesbian couple for full-time workers, dividing the sample of lesbians into primary and secondary earners paints a much more nuanced story (column 3). One group of lesbians, the primary earners, enjoys a wage premium over married straight women of almost 18 percent. The secondary lesbians, however, face a 12 percent wage *disadvantage*, or penalty. These results provide an immediate indication that important differences within the group of lesbians had been missed before.

Including motherhood into the equation for full time workers (column 4) shows that there is a motherhood wage penalty for straight mothers with children of every age above 5, but not for mothers with children between birth and five years old, which is surprising and may be due to the selection bias into motherhood mentioned above.

Looking at the motherhood effect for lesbians shows that there is a positive relationship

¹² The models in tables 1.2 and 1.3 included controls for race, ethnicity, education, region, metropolitan status, and occupation but were left out of the tables for brevity. Results are available upon request.

between being the mother of a small (0-5) child for the primary lesbians. The effect of children on secondary lesbians, however, is no different than it is on straight women. A similar story emerges when looking at women who work any positive number of hours (column 2), but here there no extra positive relationship between motherhood and wages for primary earners. All women in this sample appear to have a slight motherhood premium when the youngest child is between zero and five, but face a penalty at all other stages at the youngest child's life. The extra positive relationship between motherhood and wages for primary lesbian mothers of children aged zero to five resembles the fatherhood wage premium (the "daddy bonus") that has been observed in the literature for straight men (Lundberg & Rose 2000; Budig & Hodges 2010).

Turning now to a similar analysis of lesbians versus unmarried straight women (Table 1.3), we see a similar trend in the results. Primary earning lesbians working full time enjoy a 26 percent wage premium over unmarried straight women with similar demographic characteristics, and secondary earning lesbians do slightly worse than unmarried straight women, facing an 7.8 percent wage penalty. Motherhood has a negative relationship with wages for straight women and secondary lesbian earners whose children are less than 13, but there is a positive and statistically significant relationship between motherhood and wages for primary lesbian earners. The parallel analysis of all workers (columns 1 and 2) shows that controlling for motherhood and hours worked results in a fall of the lesbian wage premium from 29 to 25 percentage points for primary earners and an increase in the wage penalty from 12 to 13 percent for secondary earners. There is a negative relationship between wages and motherhood for straight and secondary lesbian mothers whose youngest child is under 13, and a positive

relationship between motherhood and wages for primary earning lesbian mothers whose children are under 13. The R^2 measure of the goodness of fit for the models presented in both Tables 1.2 and 1.3 is quite high for a wage regression; the variables included in the analysis explain between 34 and 38 percent of the difference between the mean wages of lesbians and straight women.

To compare the effect of various characteristics on the wages of the women in different sexual orientation and family status groups, I run separate wage regressions for the entire group of lesbians, married straight women, and unmarried straight women. The results of these separate OLS wage regressions are presented in Table 1.4. Most of the results are common and expected: higher number of hours worked per week, having more working experience, living in the northeast or the west, living in a city, and having higher education levels are correlated with higher wages; being black or another race other than white and living in the South is correlated with lower wages. Some characteristics correlate with wages differently by sexual orientation and family status: married straight women with a Ph.D. or professional degree earned higher returns to these degrees than lesbians (a difference of 23.3 percentage points; 8.3 percentage points for unmarried straight women), and the (negative) return to being black is 3.4 (0.4) percentage points higher for lesbians than for straight married (unmarried) women.

The effect of motherhood differs by sexual orientation and family status as well: being a mother has a strong positive relationship with wages for lesbians (especially for those with children under six), a negative relationship with wages for unmarried straight women (especially for those with children under 13), and a negative relationship with straight married women's wages, except for those with a child under 6, where there is a

surprisingly positive relationship with wages. As discussed above, the positive relation between motherhood and wages for lesbians may be the case because of lesbians' selection into motherhood (higher earning women may be more willing and able to become mothers, and may be more able to keep or receive custody of their children). Furthermore, lesbians are more likely than straight women to have a partner who is the primary care-taker for the child. Lesbian mothers are more likely than straight mothers to be able to specialize in market work, because of their partners' gender.

To study which characteristics contribute to the mean lesbian wage premium and how relatively important they are, the results of the Oaxaca-Blinder decomposition are presented in Table 1.5. Compared to married straight women, about the same amount of the lesbian premium comes from higher endowments of observable characteristics and the returns to those characteristics. As Antecol *et al.* (2008) also found, it is mainly differences in education levels which drives the difference in the wages of lesbians and straight married women. Lesbians' lower level of potential work experience (due to the fact that they are, on average, younger) has a negative relationship with their wages.

Most of the wage premium experienced by lesbians over unmarried straight women is attributable to differences in their endowments. Indeed these differences make up more than 90 percent of the earnings difference between lesbians and straight unmarried women (.333/.365). The main characteristics that drive the difference between the wages of lesbians and straight unmarried women are the difference in usual hours worked and the different ethnic composition of the two samples. Further, the returns to motherhood play an important role in lesbians' higher wages; the returns to motherhood, which are positive for lesbians, have much to do with lesbians' higher earnings.

We now move to a decomposition analysis of our independent variables of interest on the straight-lesbian wage gap using the DFL counterfactual, which allows us to see the wage gap along all points of the wage distribution and see the effect of motherhood on the wage gap in this way as well. Here I use the “related” definition of motherhood. (The results using the “IPUMS” motherhood variable are in the appendix and are largely the same, because the two definitions of motherhood do not change much in the straight samples and the lesbian sample is weighted by the probability of having straight characteristics.) Figure 1 shows the wage gap between lesbians and straight married women, with and without weighting the lesbian sample by the weight in equation (1.3) above, which takes into account motherhood status, hours worked, occupation, experience, education, race and ethnicity, region, and metropolitan status. The top panel shows the wage gap between primary lesbian partners and straight married women, while the bottom panel shows the gap between secondary lesbian partners and straight married women. The graphs on the left of both panels use the earnings definition of primary versus secondary partner, and the graphs on the right hand side use the household roster definition.

The dashed blue line shows the (unconditional) wage gap between lesbians and married straight women without controlling for any of these characteristics. Here our expectations for the primary partners are confirmed: the unconditional gap shows that primary lesbians earn about 30-40 percent more than straight women over most of the wage distribution using the earner definition of primary and secondary, and between ten and 20 percent using the household roster definition. On the other hand, the wages of the secondary lesbians are generally lower than those of the primary lesbian partners:

between 10 and 20 percent lower using the earner definition of secondary, and about .5 percent higher by the household roster definition.

Creating a counterfactual distribution of wages allows us to see the effect of being a lesbian, as we create this counterfactual by assigning both primary and secondary lesbians the same distribution of characteristics as straight women. Any gap in the actual distribution of wages for straight women and this counterfactual distribution is due to the effect of being a lesbian. All panels of figure 2 present the gap between married straight women's earnings and the counterfactual lesbian earnings (solid red line), and we can see that taking the observable characteristics discussed above into account does lower the lesbian wage premium for primary lesbians over most of the distribution, and increases the size of the lesbian wage penalty for the secondary lesbian partners.

How does motherhood relate to wages for these groups of women? The dotted green line shows us the contribution of motherhood to the composite effect of being a lesbian on the wage gap. Motherhood is positively related to wages for the group of primary lesbians, where we see that the highest earning primary lesbians experience the strongest positive relationship between motherhood and their wages. Aside from the very highest earning secondary lesbian partners, though, motherhood is negatively related to wages for the lesbians in this group – especially the lowest earning ones. Motherhood is good for the wages of one group of lesbians, and bad for the other.

This result makes sense in the contexts of the literature on household specialization. Although we had always observed a lesbian wage premium in the past, this analysis shows only some lesbians receive a lesbian wage premium – and it is so strong for that group of lesbians, that the lesbian penalty faced by the other half of the

lesbian population was being overshadowed. While this analysis does not test for this possibility explicitly, one explanation for the vastly different effect of motherhood on the two groups of lesbian's wages is that there might be household specialization in lesbian couples. If one of the women in a lesbian couple does more paid work when there is a child in the household and the other woman does less, this fact would be reflected in their wages. Indeed, the differences in the outcomes for primary and secondary lesbians parallels the story found in different-sex couples: the presence of children is generally negatively correlated with mother's wages, but positively correlated with father's wages (Lundberg & Rose 2000; Hodges & Budig 2010).

Comparing lesbians to unmarried straight women presents us with a story with one interesting similarity and one interesting difference. In figure 2 we see the large unconditional wage gap (dashed line) of about 60 percent between primary earner lesbians and unmarried straight women; the primary lesbians using the household roster definition have an unconditional wage advantage between 20 and 50 percent. The secondary earners also have an unconditional wage advantage over straight unmarried women: they earn up to 40 percent more using the household roster definition of secondary.

Using the same tools of analysis as above with the straight married women, we see that accounting for differences in observable characteristics eliminates much of the lesbian wage premium, and as in the case of lesbians compared to straight unmarried women, it results in a lesbian wage penalty for the secondary lesbians. Compared to straight unmarried women, there is a wage penalty for being a lesbian for the secondary lesbians between 0 and 40 percent. This lesbian penalty is lower at higher points along

the wage distribution. The group of primary lesbians exhibits a wage premium over unmarried straight women, ranging from zero to 20 percent.

Examining the effect of motherhood on the lesbian-straight unmarried wage gap, we see an interesting difference from the lesbian-straight married wage gap story. In the latter, motherhood was negatively related to wages for the group of secondary lesbians (the dotted green line was below zero). However, for both primary and secondary lesbians, the effect of motherhood on wages is positive for lesbians compared to straight unmarried women. The Oaxaca-Blinder decomposition in Table 1.5 showed that there are high positive returns to motherhood for lesbians compared to unmarried straight women at the mean, but this analysis shows that to be true across the entire wage distribution. One explanation for this finding is that selection into motherhood is positively related to wages for lesbians, but possibly negatively related to wages for unmarried straight women, perhaps because selection into motherhood for straight unmarried women may be associated with unplanned pregnancy.

Discussion and Conclusions

The empirical analysis in this paper shows that accounting for all observable characteristics, including motherhood status, presents a more nuanced story of the lesbian-straight wage gap than the one that presently exists in the literature on the economics of sexual orientation. It shows that there are two distinct groups of lesbians, one of whom enjoys a strong wage premium over straight women, while the other suffers from a wage penalty for being a lesbian. Compared to unmarried straight women, motherhood is positively associated with all lesbian's wages, but only primary lesbians

experience a positive relationship between motherhood and wages when compared to straight married women. Motherhood is negatively correlated with wages for the group of secondary lesbians, perhaps because the secondary partner specializes in care of the child. Future research on the economic lives of lesbians should consider the possibility that as in different-sex couples, one member of a lesbian couple may be faring better in the labor market than her partner.

Table 1.1: Means for variables of interest, by sexual orientation and family status

Variable	Sexual Orientation/Marital Status			Lesbian Division: Earner Definition		Lesbian Division: Roster Definition	
	Married Straight (1)	Unmarried Straight (2)	Lesbian (3)	Primary (4)	Secondary (5)	Primary (6)	Secondary (7)
Log Hourly Wage	2.866** (0.001)	2.601** (0.004)	2.965 (0.015)	3.228 (0.021)	2.724** (0.021)	3.013 (0.022)	2.913** (0.021)
Log Hourly Wage Gap	0.099	0.364					
Percent Mothers - Related	62.87** (0.001)	41.88** (0.003)	28.27 (0.010)	27.43 (0.014)	28.64 (0.014)	29.07 (0.014)	27.18 (0.014)
Percent Mothers - IPUMS	62.02** (0.001)	29.16** (0.003)	15.69 (0.008)	16.60 (0.012)	14.63 (0.011)	26.98 (0.013)	3.14** (0.006)
Potential Experience	23.78** (0.025)	14.99** (0.074)	20.11 (0.219)	19.93 (0.316)	20.18 (0.312)	20.53 (0.302)	19.65* (0.318)
Average Hours/Week	37.05** (0.024)	37.75** (0.065)	40.68 (0.211)	41.25 (0.301)	40.18* (0.308)	41.08 (0.313)	40.24* (0.280)
Weeks Worked Last Year	46.43* (0.024)	45.62** (0.082)	46.90 (0.230)	47.19 (0.324)	46.46 (0.338)	47.08 (0.325)	46.70 (0.324)
<i>Education (%)</i>							
Less than HS	5.07** (0.001)	8.39** (0.002)	2.53 (0.004)	1.54 (0.032)	3.23* (0.006)	2.36 (0.005)	2.71 (0.005)
HS graduate	42.92** (0.001)	54.23** (0.003)	36.92 (0.010)	31.50 (0.014)	40.68** (0.014)	34.99 (0.014)	39.05* (0.015)
Associate's Degree	11.32** (0.001)	10.29* (0.002)	8.79 (0.006)	8.59 (0.008)	9.10 (0.008)	8.68 (0.008)	8.91 (0.008)
Bachelor's Degree	24.80** (0.001)	19.61** (0.003)	28.00 (0.009)	28.96 (0.014)	27.81 (0.013)	28.87 (0.013)	27.04 (0.013)
Master's Degree	12.22** (0.001)	5.79** (0.001)	16.95 (0.007)	20.31 (0.012)	14.29** (0.009)	17.97 (0.011)	15.83 (0.010)
Professional/Doctorate	3.65** (0.000)	1.69** (0.001)	6.81 (0.005)	9.10 (0.008)	4.89** (0.006)	7.12 (0.007)	6.46 (0.007)
<i>Race (%)</i>							
White	82.66 (0.001)	79.18** (0.003)	83.93 (0.008)	85.58 (0.011)	82.79* (0.012)	84.18 (0.012)	83.66 (0.012)
Black	6.65** (0.001)	9.51 (0.002)	8.58 (0.007)	7.47 (0.009)	9.30 (0.010)	9.02 (0.010)	8.09 (0.009)
Other	10.69** (0.001)	11.30** (0.002)	7.49 (0.006)	6.95 (0.008)	7.90 (0.008)	6.80 (0.007)	8.26 (0.008)
<i>Ethnicity (%)</i>							
Hispanic	10.78 (0.001)	15.50** (0.003)	10.00 (0.006)	9.80 (0.009)	10.47 (0.009)	8.85 (0.008)	11.27* (0.009)
<i>Region (%)</i>							
Northeast	18.04* (0.001)	18.76 (0.003)	19.88 (0.008)	19.75 (0.012)	19.51 (0.011)	20.04 (0.011)	19.72 (0.012)
Midwest	25.04** (0.001)	24.81** (0.003)	20.89 (0.009)	21.24 (0.013)	20.65 (0.012)	21.03 (0.013)	20.72 (0.013)
South	35.36* (0.001)	32.06 (0.003)	33.68 (0.010)	33.76 (0.014)	34.18 (0.014)	34.04 (0.014)	33.28 (0.014)
West	21.55* (0.001)	24.38 (0.003)	25.55 (0.009)	25.25 (0.013)	25.66 (0.012)	24.89 (0.012)	26.28 (0.013)
<i>Metropolitan Status</i>							
Lives in City	50.11** (0.001)	51.36** (0.003)	58.69 (0.010)	58.23 (0.015)	57.76 (0.014)	58.64 (0.014)	58.74 (0.015)
Observations	276246	31963	3152	1459	1622	1643	1509

Notes: In columns 1 and 2 a statistically significant difference in means, relative to column 3, is indicated by * ($p < .10$) or ** ($p < .01$). Differences between columns 4 versus 5 and 6 versus 7 are indicated in the same way.

Table 1.2: OLS predicting log hourly wages with earner classification of primary/secondary, lesbians versus straight married women

	(1)	(2)	(3)	(4)
Sample:	All	All	Full-Time Workers	Full-Time Workers
Lesbian Primary Earner	0.203*** (0.01)	0.176*** (0.02)	0.165*** (0.02)	0.148*** (0.02)
Lesbian Secondary Earner	-0.157*** (0.02)	-0.176*** (0.02)	-0.130*** (0.02)	-0.135*** (0.02)
Mother 0-5		0.038*** (0.00)		0.043*** (0.00)
Mother 6-12		-0.030*** (0.00)		-0.010** (0.00)
Mother 13-17		-0.028*** (0.00)		-0.019*** (0.00)
Mother 18+		-0.025*** (0.00)		-0.032*** (0.00)
Lesbian Mother 0-5 - Primary		0.081 (0.06)		0.123** (0.06)
Lesbian Mother 6-12 - Primary		0.084 (0.05)		0.072 (0.05)
Lesbian Mother 13-17 - Primary		-0.043 (0.08)		-0.027 (0.06)
Lesbian Mother 18+ - Primary		0.039 (0.06)		0.016 (0.07)
Lesbian Mother 0-5 - Secondary		-0.007 (0.06)		-0.000 (0.06)
Lesbian Mother 6-12 - Secondary		0.076 (0.06)		0.020 (0.07)
Lesbian Mother 13-17 - Secondary		0.103 (0.09)		0.137 (0.09)
Lesbian Mother 18+ - Secondary		-0.041 (0.10)		-0.052 (0.14)
Usual Hours Worked		0.003*** (0.00)		
Constant	2.378*** (0.01)	2.253*** (0.01)	2.341*** (0.01)	2.346*** (0.01)
Observations	279398	279398	178870	178870
R-squared	0.342	0.346	0.379	0.380

Notes: Author's calculation on 2010 ACS data. Standard errors in parentheses. Results for occupation, race, ethnicity, region, metropolitan status, education, and potential experience not shown. Statistically significant results denominated by *** ($p < 0.01$), ** ($p < 0.05$), * ($p < 0.1$).

Table 1.3: OLS predicting log hourly wages with earner classification of primary/secondary, lesbians versus straight unmarried women

	(1)	(2)	(3)	(4)
Sample:	All	All	Full-Time Workers	Full-Time Workers
Lesbian Primary Earner	0.252*** (0.02)	0.227*** (0.02)	0.232*** (0.02)	0.201*** (0.02)
Lesbian Secondary Earner	-0.123*** (0.02)	-0.140*** (0.02)	-0.081*** (0.02)	-0.097*** (0.02)
Mother 0-5		-0.037*** (0.01)		-0.049*** (0.01)
Mother 6-12		-0.045*** (0.01)		-0.062*** (0.01)
Mother 13-17		0.008 (0.02)		0.009 (0.02)
Mother 18+		0.029 (0.02)		0.024 (0.02)
Lesbian Mother 0-5 - Primary		0.156* (0.06)		0.219*** (0.07)
Lesbian Mother 6-12 - Primary		0.111* (0.05)		0.126* (0.06)
Lesbian Mother 13-17 - Primary		-0.072 (0.08)		-0.056 (0.06)
Lesbian Mother 18+ - Primary		-0.015 (0.07)		-0.037 (0.07)
Lesbian Mother 0-5 - Secondary		0.072 (0.06)		0.083 (0.06)
Lesbian Mother 6-12 - Secondary		0.098 (0.06)		0.076 (0.07)
Lesbian Mother 13-17 - Secondary		0.061 (0.09)		0.091 (0.09)
Lesbian Mother 18+ - Secondary		-0.113 (0.10)		-0.123 (0.14)
Usual Hours Worked		0.000 (0.00)		
Constant	2.356*** (0.02)	2.345*** (0.03)	2.372*** (0.03)	2.375*** (0.03)
Observations	35115	35115	23400	23400
R-squared	0.376	0.377	0.397	0.399
Notes: Author's calculation on 2010 ACS data. Standard errors in parentheses. Results for occupation, race, ethnicity, region, metropolitan status, education, and potential experience not shown. Statistically significant results denominated by *** (p<0.01), ** (p<0.05), * (p<0.1).				

Table 1.4: Separate OLS regressions by household type

	Straight Married	Straight Unmarried	Lesbian
Mother 0-5	0.0367*** (8.57)	-0.0433*** (-4.31)	0.121** (2.77)
Mother 6-12	-0.0302*** (-7.82)	-0.0448*** (-3.73)	0.0318 (0.80)
Mother 13-17	-0.0275*** (-6.77)	0.0138 (0.85)	-0.0345 (-0.61)
Mother 18+	-0.0244*** (-6.34)	0.0371* (2.26)	-0.0905 (-1.31)
Experience	0.0619*** (24.13)	0.0858*** (19.62)	0.0850*** (4.52)
Experience^2	-0.280*** (-14.72)	-0.480*** (-12.35)	-0.327* (-2.07)
Experience^3	0.0570*** (10.37)	0.116*** (9.05)	0.0594 (1.16)
Experience^4	-0.00428*** (-7.89)	-0.00972*** (-7.03)	-0.00402 (-0.73)
Usual Hours Worked	0.00298*** (19.36)	-0.0000551 (-0.11)	0.00409* (2.54)
Less Than High School	-0.207*** (-31.16)	-0.249*** (-17.48)	-0.254** (-3.16)
Associate's Degree	0.128*** (30.91)	0.159*** (13.62)	0.0928* (2.11)
Bachelor's Degree	0.327*** (89.63)	0.369*** (35.55)	0.353*** (11.20)
Master's Degree	0.562*** (119.56)	0.571*** (35.18)	0.481*** (11.10)
Doctoral/Professional Degree	0.750*** (90.77)	0.703*** (23.51)	0.661*** (12.14)
Black	-0.0258*** (-4.94)	-0.0565*** (-4.48)	-0.0613 (-1.16)
Other Race	-0.0483*** (-10.57)	-0.0301* (-2.43)	-0.0108 (-0.24)
Hispanic	-0.0719*** (-15.74)	-0.0589*** (-5.29)	-0.00704 (-0.18)
New England	0.109*** (29.10)	0.117*** (11.20)	0.0761* (2.18)
West	0.101*** (26.76)	0.114*** (10.95)	0.0954** (2.86)
South	-0.0105*** (-3.32)	0.00908 (0.97)	-0.0370 (-1.15)
City	0.149*** (59.10)	0.144*** (20.19)	0.207*** (9.19)
Constant	2.268*** (0.0135)	2.169*** (0.0281)	2.005*** (0.105)
R-squared	0.344	0.351	0.441
Notes: Author's calculation on ACS 2010 data. Results for 25 occupational categories not shown. Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1			

Table 1.5: Oaxaca-Blinder Decomposition for lesbian versus straight married and unmarried log hourly wages

	Straight Married versus Lesbian		Straight Unmarried versus Lesbian	
Total Log Hourly Wage Gap	0.099***		0.365***	
	(0.015)		(0.016)	
	endowments	returns	endowments	returns
Portion Due To...	0.0549***	0.0442**	0.333***	0.0313*
	(0.0154)	(0.0176)	(0.0153)	(0.0167)
Motherhood	-0.00277	0.0511	0.0182***	0.142**
	(0.0104)	(0.0593)	(0.00488)	(0.0628)
Usual Hours Worked	0.0225***	-0.0218	0.137***	-0.0280**
	(0.00594)	(0.0156)	(0.00993)	(0.0137)
Education	0.0612***	-0.00196	0.00187	-0.00178
	(0.00633)	(0.00657)	(0.00201)	(0.00810)
Race	-0.000625	0.0109**	0.000402	0.0100
	(0.00187)	(0.00428)	(0.00217)	(0.00636)
Ethnicity	5.70e-05	0.279***	0.134***	0.124*
	(0.000311)	(0.0741)	(0.00889)	(0.0682)
Experience	-0.0611***	0.0217*	0.0149***	0.0283**
	(0.00671)	(0.0118)	(0.00279)	(0.0126)
City	0.0175***	-0.0196	0.00114	-0.0332
	(0.00291)	(0.0217)	(0.00162)	(0.0226)
Region	0.00554***	-0.0211	0.0381***	-0.0778***
	(0.00190)	(0.0238)	(0.00482)	(0.0275)
Occupation	0.0127***	-0.031	0.027***	-0.130***
	(0.00310)	(0.023)	(0.002)	(0.106)
Source: Author's calculation on ACS 2010 data. ***p<0.01, **p<0.05, *p<0.1				

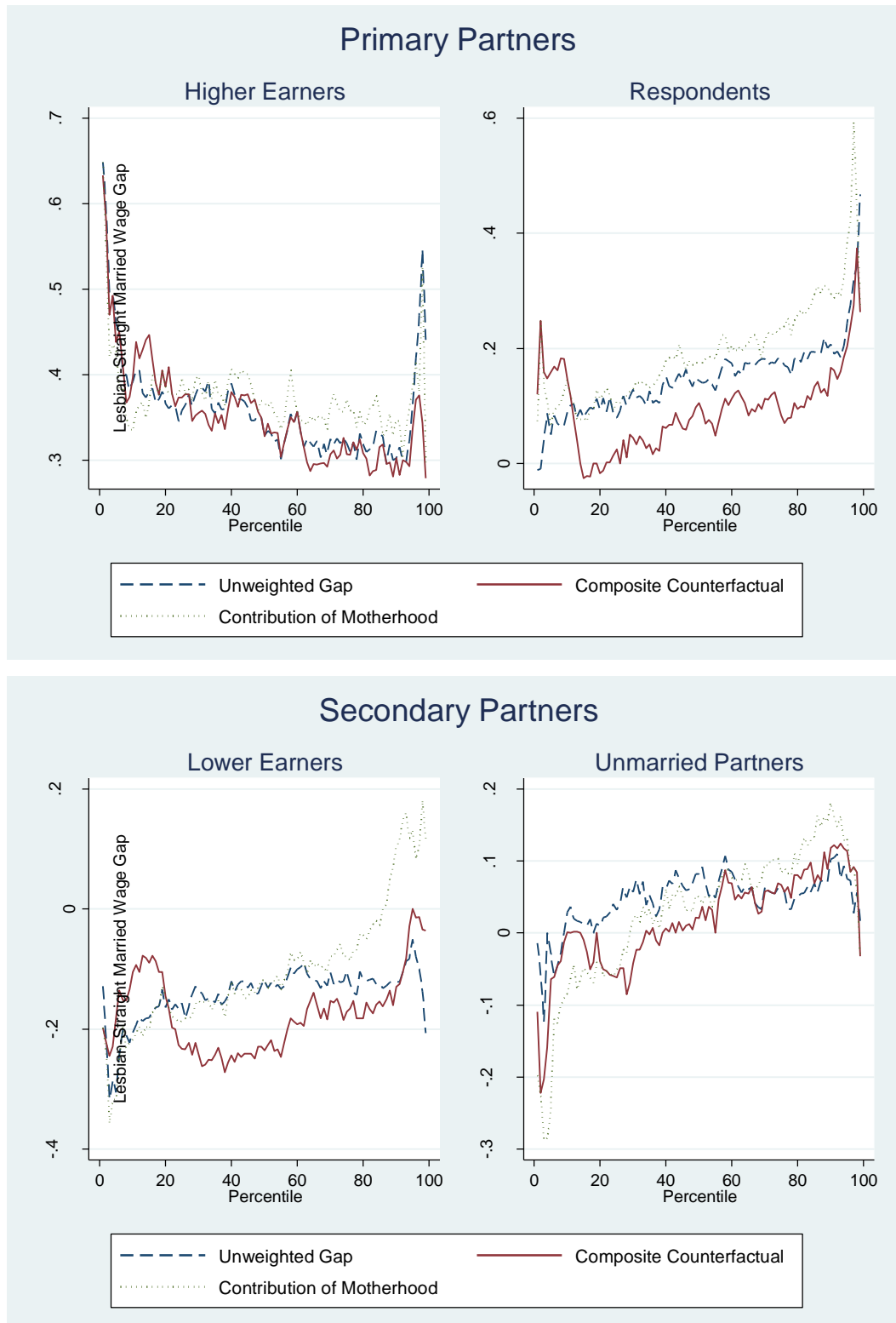


Figure 1: DFL comparing lesbians and straight married women

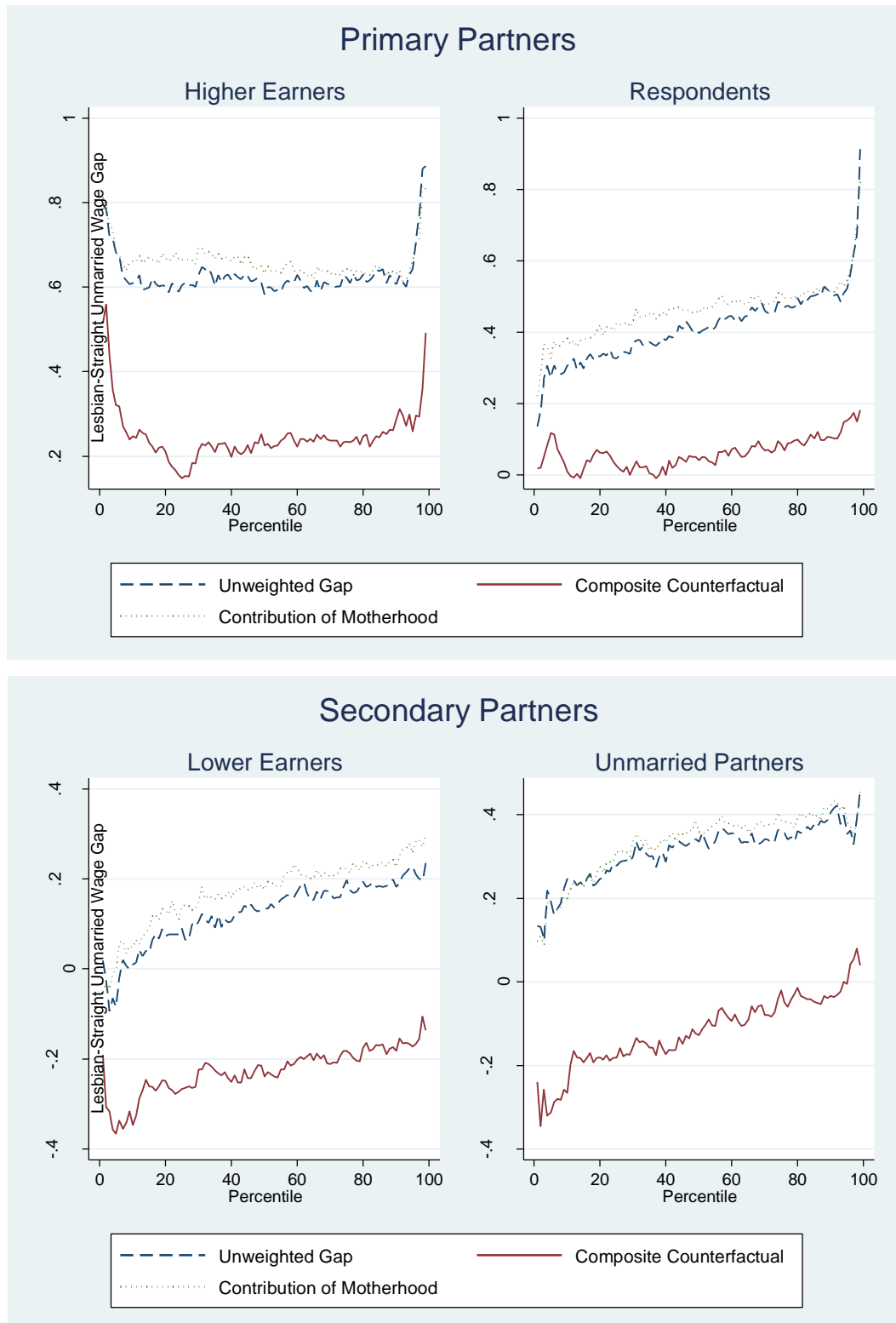


Figure 2: DFL comparing lesbians and straight unmarried women

CHAPTER 2

THE HOUSEHOLD DIVISION OF LABOR IN SAME-SEX COUPLES

Introduction

The sexual division of labor in a household, in which men perform the bulk of the paid work and women perform the bulk of unpaid work, is one of the key items of inquiry in the fields of labor and feminist economics. It has been cited as a fundamental explanation of the difference in men and women's economic lives, and it is a critical part of people's daily experiences. Hartmann (1981b), among others, considers the sexual division of labor the crucial link between capitalism and male dominance. Folbre (1994, see especially p. 48) points out that the sexual division of labor is an important institution (a "means of coordinating the activities of individuals and groups" (p. 48)) in economic and social life and a main channel through which men and women's economic lives are determined. But does the economic and social importance of the sexual division of labor necessarily mean that a couple's division of labor is always based on sex? Does it mean that same-sex couples do not exhibit a systematic division of labor, wherein the characteristics of the people in a couple are related to the type of work that they do?

Empirical analyses of time spent by people in couples in the US consistently show that on average, women married to men perform twice as much unpaid household labor as their husbands (Robinson & Godbey 1997; Coltrane 2000; Bianchi *et al.* 2000; Artis & Pavalko 2003). In different-sex couples, a person's sex is the main determinant of his or her specialization into paid or unpaid work. In same-sex couples, however, the story is not so clear. The people in same-sex couples may not specialize in paid or unpaid

work based on their *sex*, but that does not mean that the couple does not find some systematic mechanism to assign work roles in the household. As we will see, there is good reason to think that same-sex couples may also engage in a household division of labor, where one couple member performs more of the paid work, while the other does more of the unpaid care work and household work.

This paper draws on the theoretical and empirical developments in economics and other social sciences which show that same-sex couples might and indeed sometimes do engage in a division of labor, and further asks the following: if same-sex couples do not make specialization decisions based on the sex of its members, upon what lines do they make decisions about work?

Theoretical Background

The existing literature on the economics of the household has addressed the sexual division of labor in different-sex couples rather extensively and the phenomenon is already quite well theorized from both neoclassical and heterodox perspectives. To a large extent, these theories can be extended to same-sex couples with some modification.¹³

The most influential economist to theorize the household division of labor has been Gary Becker. In his eminent works “A Theory of the Allocation of Time” (1965) and *A Treatise on the Family* (1991), Becker offers his explanation of how people in different-sex couples divide their working time into household and care work versus

¹³ Badgett (1995, p. 123) warns against blindly applying the models built and mainly used to analyze different-sex couples to a study of same-sex couples, in part based on concerns that in doing so, economists can “overlook the important legal, political, and cultural differences that shape the economic position and behavior of families formed by lesbian, gay, and bisexual people.” Her point is well-taken, and the extensions to the models which I suggest here try to take those differences into account.

labor market work to maximize household efficiency. As households need to perform both household and labor market work but have limited time to accomplish all tasks, it is in their best interest to produce as efficiently as possible. Based on the theory of comparative advantages – that people with different skills should specialize in particular (different) tasks and then trade in order to maximize their joint productivity – and Becker's assertion that biological differences between the sexes give women an advantage in household and care work while men have an advantage in labor market work, it follows that different-sex couples should engage in a sexual division of labor to increase efficiency.

Biological differences and the presence of children play the key roles in Becker's theory: supposing that men and women start with equal marginal productivities in paid work, the time away from the labor market to bear, care for, and raise children lowers women's marginal productivity in paid work relative to men's, and since wages are set equal to a worker's marginal productivity in this model, women's wages subsequently decline relative to their male partner's wages over time. In other words, because women bear children, they must take time away from the labor market, which leads to them earning less money. The initial divergence in men and women's wages created by child bearing is further accentuated by related variation in human capital investment: since they know that they will do more paid work over their lifetimes, men spend more time in school and on-the-job training than women do. These higher investments in education and on-the-job training further increase men's marginal productivity, widening the gap between the wages of men and women (Becker 1991, chapter 2).

The comparative advantage model also accommodates the possibility that women

would continue labor market work after having a child. In this case, women would continue to do household work because of their comparative advantage in it, developed shortly after childbirth. Although she is better at this work than her male partner, the work still drains her energy and leaves her to choose a paid job compatible with household and care work, the work she in which she has an advantage (Becker 1985; Becker 1991). Becker therefore suggests that mothers would be more likely than non-mothers to work in jobs which require less energy or which have parent-friendly characteristics, such as flexible hours and few demands for travel or nonstandard shifts. Becker suggests that parent-friendly jobs are lower paid, although there seems to be evidence against that assertion in the literature (Budig & Hodges 2010). If the paid jobs that mothers chose were indeed lower paid than men's jobs, mothers' comparative advantage in non-market work would become even more pronounced.

In sum, the comparative advantage model says that both household and labor market work need to be performed, and that couples maximize their efficiency in doing that work by having each member of the couple specialize where their respective comparative advantages lie: women in household and care work and men in labor market work. Becker's model depends on biological differences among men and women and the presence of children (or the potential for children) as the foundations of the model. Indeed, he wrote that "households with only men or only women are less efficient because they are unable to profit from the sexual difference in comparative advantage" (1991, pp. 38-9).

However, we can go beyond assuming that it is only difference in biological sex which can create comparative advantages, even in households with children. The lack of

difference in biological sex does not exclude same-sex couples with children from gaining efficiency via specialization (Badgett 1995; Badgett 2001). An obvious example of this possibility is the case of lesbian couples in which one member of the couple is a biological mother of the couple's child; the biological parents should, according to Becker, have a comparative advantage in household and care work. Indeed in any case in which one member of the couple is "better" at household/care work or labor market work vis-à-vis their partner, the couple should specialize to increase efficiency. Badgett (2001, p. 130-1) says that "[g]iven differences in education, upbringing, and tastes... it seems likely that gay individuals' marginal products in home and market production vary, making comparative advantage of potential equal relevance for same-sex households." Cases in which comparative advantage is based on tastes or preferences are not observable in economic surveys, but some observable characteristics which would correlate with a comparative advantage in the labor market do exist. For couples in which one member is more highly educated, for example, or for interracial couples, wherein the white member is less likely to face labor market discrimination (Badgett 2001, p. 265, n. 6), the more highly educated partner or the white partner can have a comparative advantage relative to their partner in paid work. Therefore, the comparative advantage model can be useful in explaining the work decisions of same-sex couples, and not just those with children.

While Becker's model is certainly useful, there are other explanations of a household division of labor into paid and unpaid work which consider factors beyond comparative advantages in how couples assign roles in the household. Three prevalent alternative theories of specialization in paid or unpaid work use models which consider

bargaining power, institutional constraints, and gender roles as important social conditions that couples and households face, which can motivate a household division of labor (cf. Braunstein & Folbre 2001; Badgett 2001; Giddings 2003; Iversen & Rosenbluth 2006). These models were initially developed to provide insight into the labor decisions of different-sex couples, but we can also apply them to same-sex couples. Understanding a couple's division of labor in terms of bargaining power, institutional constraints, and gender roles allows us to supplement the comparative advantage model with insights that consider how imbalances of power affect couples' lives and decision making (Agarwal 1997; Giddings 1998; Bittman *et al.* 2003; Kroska 2004); they allow us to move our understanding of a couple's division of labor away from one which depends mainly on efficiency maximization to one which includes the ways in which social structures affect household decision making.

Bargaining power refers to one person's ability to impose their own desires onto their partner, typically because they have a higher fallback position outside of the relationship. Comparisons of household members' fallback positions are usually made in terms of wages, non-wage income, wealth, or other related characteristics (such as age and education, which are correlated with the former set of outcomes) (Oreffice 2007; Bobonis 2009). Applied to the question of the division of labor in a different-sex couple, we could imagine an example in which a married woman's income increases, reducing the husband's share of the total household income and subsequently, his bargaining power. The decrease in the woman's dependence on her husband's wages allows her to have more of a say in the decision of how to allocate their labor time; she would now

have more leverage in saying that she wants to concentrate on her paid work and have less responsibility for household work (Ross 1987; Iversen & Rosenbluth 2006).

The concept is the same for same-sex couples: we might expect the couple member with more income or higher education (because of stronger career prospects) to use their relative bargaining power over their partner and take less responsibility for the unpaid and socially undervalued household labor. To the extent that bargaining power depends on differences in personal characteristics such as race, ethnicity, and educational attainment – which can be the case because some groups have more resources than others – we might expect to see bargaining power play an important role in determining the division of labor in same-sex couples, since same-sex couples are somewhat more likely than different-sex couples to have a partner with different labor and non-labor traits such as race, age, level of education, investment income, and hourly earnings (Badgett 2001; Jepsen & Jepsen 2002; Jepsen & Jepsen 2006; Oreffice 2011; Oreffice 2012).

A second alternative theorization of the household division of labor names the institutional constraints facing a couple as factors which can influence a couple's decision of how to distribute their working responsibilities. Institutional constraints are broad social norms or rules that influence individuals' decisions. Women's lower wages compared to men, for example, are a part of institutionalized male dominance and play an important role in women's relegation to household work. Racism is another institutionalized structure that constrains people's choices; in an interracial couple, the person of color may find it harder to find paid employment or be paid less money, potentially resulting in them doing more household work in order to increase their contribution to the household.

Constraints such as the exclusion of same-sex couples from marriage or institutionalized homophobia and discrimination against LGBT people may be important factors in the division of labor decision in same-sex couples. As explained by Becker (1991), Badgett (1995), Carrington (1999) and Giddings (2003), the lack of legal recognition of same-sex marriage in most states means that there is no lawful recourse to a person in a dissolved same-sex partnership who had left the labor market to do household and care work; in contrast, when heterosexual couples divorce, the person who had exited or reduced time in the labor market in order to do more of the household and care work has the legal right to alimony (even though states might not adequately enforce alimony rights or provide reasonable compensation). In this sense, we might expect married same-sex couples to exhibit a greater division of labor than unmarried same-sex couples, although the fact that same-sex marriage is rather recent and uncharted territory for the courts may make married same-sex couples hesitant to take the economic risk of specializing. Further, a lack of support from estranged parents and family members could encourage LGBT people to stay in the labor market and secure their own means of income, being more averse to losing their job. Discrimination in the labor market might mean that people in same-sex couples would need to work for pay as much as possible. On the other hand, Carrington (1999, p. 197) suggests that the lack of mobility for “lesbigay” people in the labor market might encourage them to do more domestic work, because they have more time to do so and because of the “disenchantment with notions of meritocracy and undivided commitment to work.”

Another important institutional constraint that influences the average household division of labor into paid and unpaid work in the population of same-sex couples as a

whole is the potential legal difficulty for a same-sex couple to adopt a child. While only two states explicitly prohibit adoption by same-sex couples, only 16 states and Washington, D.C. explicitly allow joint adoption by same-sex couples, and just 10 states and Washington, D.C. allow for same-sex second parent adoption; in other states, the law differs by jurisdiction (Human Rights Campaign, 2013). Partly as a result, a smaller percentage of same-sex than different-sex couples has children (e.g. Black *et al.* 2007; Giddings *et al.* 2013). As discussed above, children are the most important factor in a couple's decision to specialize (Becker 1991; Hersch & Stratton 1994; Dalmia & Sicilian 2009); Black *et al.* (2007) and Giddings *et al.* (2013) show that in households where children are present, same-sex couples as well as different-sex couples are more likely to have one person staying at home full-time. Thus, although children seem to affect the specialization patterns of same-sex and different-sex couples similarly, the fact that fewer same-sex than different-sex couples have children means that the population of same-sex couples might be less likely to have a division of labor than the population of different-sex couples, on average. However, within the couples themselves, we might expect similar levels of specialization. Indeed the division of labor into paid and unpaid work in couples with children may be in part a result of institutional constraints itself: parents prefer to do care work themselves, but face large penalties for doing part-time instead of full-time paid work. Therefore specialization is often the most reasonable choice.

Finally, gender roles, which are social prescriptions of how biological men and women should behave, may also play an important role in couples' division of labor decision. Gender roles are learned through social norms and policed heavily, even at a young age (Thorne 1993). Hartmann (1981a, p. 371) and England & Farkas (1986) argue

that different kinds of work have been “gendered” (prescribed normative gender roles); caring work, for example, has come to be seen as work for women because women’s gender roles prescribe that they should be caring and altruistic. Young men and women learn these roles and perpetuate them throughout their lives, encouraging their own (and other people’s) belief and expectation that women will do more household and caring labor while men do more paid work.

If people in same-sex couples behave according to the gender assigned to their biological sex, we should expect a lesser degree of specialization in these households compared to different-sex couple households (Badgett 2001). It is possible, however, that people in some same-sex couples perform heteronormative gender roles, where one person in the couple plays the “feminine” role while the other plays the “masculine” role. Some of the leading scholars in the field caution against the notion, though: Badgett (1995, p. 131), citing Peplau (1991), says that “research in other social sciences reveals that same-sex couples typically reject gender roles,” and the survey data collected by Patterson (2000) and Blumstein & Schwartz (1983) show that lesbian couples tend to reject gender role norms. Despite these results, Weston (1991), Kennedy & Davis (1993), and Giddings (2003) theorize that many same-sex couples exhibit gender differences within the couple.

The four theoretical explanations for household specialization presented above – comparative advantages, bargaining power, institutional constraints, and gender roles – can explain a household division of labor into paid and unpaid work in both different-sex and same-sex couples. Each theoretical framework offers a useful approach to explaining the existing empirical literature on the household division of labor in same-sex couples,

discussed below.

Review of Existing Empirical Literature

The theory reviewed above says that specialization in paid or unpaid work in same-sex couples should not be unexpected. What have the empirical studies of the work patterns of same-sex couples found thus far? Early sociological literature on the household division of labor in same-sex couples finds that that labor market work and household work are shared more equally in same-sex than in different-sex couples. Studies by Weston (1991), Blumstein & Schwartz (1983), Patterson (2000), Peplau & Spalding (2000), Solomon *et al.* (2005), and Kurdek (1993; 2007) find that many same-sex couples report on surveys and in interviews that both members of the couple perform a fairly equal amount of household labor.

However, the ethnographic work done by Carrington (1999) casts doubt over these subjectively reported results. Carrington finds that although his study participants reported valuing and doing an equal amount of household work on surveys and in interviews with both partners present, observation of the couples in everyday tasks and separate interviews with the members of the couples showed otherwise. Carrington interviewed 52 same-sex couples and lived with eight of them (four male and four female) for one week each, and noticed that even when the couple claimed to be dividing the household work evenly, their behavior showed otherwise. In actuality, these eight couples had rather strong divisions of labor into housework and labor market work. Carrington suggests that “lesbigay” couples may behave differently than they say they do with respect to a household division of labor, because constant scrutiny from the public

makes LGB people want to give an especially positive image of the gay and lesbian “lifestyle”. This pressure to present a positive public image leads them to misreport on how the work in their households is actually divided. Carrington likens his findings to Hochschild & Maschung’s (1989) concept of family myths – “myths intended to veil the actual unequal division of labor yet simultaneously affirm the basic equality of the relationship” (Carrington 1999, p. 10).

Research on black lesbian step-families in New York City done by Moore (2008) also shows that these couples engage in a systematic division of labor into paid and unpaid work. Moore found, for example, that biological mothers took on more household chores and responsibilities than their partners. Several possible explanations from the theory outline above could explain the finding that the biological parent performed relatively more household and care work than her partner. The biological mother could be performing the motherly/feminine gender role, or we can view this result through the comparative advantage lens: the biological parent in Moore’s study is more likely to have spent time out of the labor market while she was pregnant and/or while her child was small, and therefore faces *ceterus paribus* lower wages than her partner.

Further, Moore (2008) provides some empirical support for the existence of gender roles in same-sex couples: she divides her sample of 32 lesbians into “more feminine” and “less feminine” (using the respondents’ own self-identification with those terms – suggesting from the outset that same-sex couples do acknowledge their gender roles to at least some extent) and finds that the less feminine partner more often performed stereotypically male tasks such as taking out the garbage, doing yard work, and doing household repairs. Carrington (1999, p. 59), in discussing his interviews about

meal production with gay and lesbian couples, says that “[t]he gender strategies deployed by the different participants suggest an abiding concern about maintaining traditional gender categories, and particularly of avoiding the stigma that comes with either failing to engage in domestic work for lesbian families or through engaging in domestic work for gay-male families.” These studies are small and not representative, but offer some empirical evidence which suggests that at least some same-sex couples may take on heteronormative gender roles.

Economists have started to use larger and more representative samples to contribute to the conversation about the division of labor in same-sex couples. Black *et al.* (2007) use descriptive statistics of data from the 1990 and 2000 US Censuses and find that one-third of different-sex couples have a partner who does not work for pay, while that is true for only 19 percent of same-sex couples (Table 5, p. 63). Jepsen & Jepsen (2006) test for differences in specialization, defined as absolute differences or ratios in earnings and wages, in partnered couples compared to roommates. In terms of earnings, they find that members of both different-sex and same-sex couples are significantly different from each other. However, same-sex couples are indistinguishable from roommates in terms of the hours worked, while people in different-sex couples show a significant difference in the number of hours worked.

The role of children in the specialization patterns in same-sex couples has received some attention by economists, driven by the finding that the presence of children in a household is the most important predictor of a different-sex couple’s division of labor into paid and unpaid work (Lundberg & Rose 1998; Lundberg & Rose 2000; Bonke *et al.* 2007). Three papers by economists using large-scale datasets empirically explore

the role of children in the likelihood that a same-sex couple would specialize in unpaid housework and paid labor market work (Jepsen 2007; Antecol & Steinberger 2013; Giddings *et al.* 2013).¹⁴ Other relevant economics literature addresses the role of children in same-sex couples' labor supply (Tebaldi & Elmslie 2006; Black *et al.* 2007; Leppel 2009) but without being more precise about addressing specialization as such within a couple.

Jepsen (2007) performed the first empirical test of specialization in female same-sex couples and the role that children play in specialization decisions. She finds that women in same-sex couples are more likely than women in different-sex couples (either unmarried or married) to have a partner who does less than 20 hours per week of labor market work (14% versus 8% and 9%, respectively), hinting that individual women in same-sex couples are more likely to specialize in paid work than women in different-sex couples. To test for evidence of specialization in lesbian couples more directly and to see the role of children in household specialization, Jepsen regresses wages on standard human capital and demographic characteristics (race, ethnicity, experience (a function of age), education, urban status, English proficiency, and disability) as well as the number of hours the woman's partner spends in paid work, separately for women with and without children. She finds that including a variable for partner labor market hours increases the wage premium for lesbians, especially when she allows for the effect of partner hours for lesbians in particular (by interacting partner hours and a dummy variable for the partner being lesbian). The wage premium becomes stronger for lesbians

¹⁴ Earlier papers by psychologists using small samples (a maximum of 33 lesbian couples) find that lesbian couples with children specialize in paid work or household work to a lesser degree than different-sex couples with children, but that the biological mothers in lesbian couples do more childcare than their partners (Patterson 1995; Chan *et al.* 1998; Patterson *et al.* 2004).

with children once partner hours are controlled for. This finding suggests that the hours of paid work done by a lesbian's partner is negatively correlated with the first lesbian's wages, because this negative relationship was suppressing the wage premium when it was not explicitly controlled for (Table 7, p. 725). We can interpret the finding as some indication of specialization: as one partner does more labor market work, the other earns less in total – perhaps because she herself is working less. Interestingly, Jepsen does not interpret her finding in that way: instead she reports that she finds no evidence of specialization. Perhaps part of the confusion in interpretation comes about because Jepsen only reports the coefficient on the lesbian dummy variable, and leaves the reader inferring from the bit presented in the paper what the rest of the coefficients (e.g. on partner hours) must be in terms of sign and magnitude.

Also using 2000 Census data, Leppel (2009) finds that the presence of a child under five increases the log of the odds of being unemployed or out of the labor force for women in different-sex couples (married and unmarried). Women in different-sex couples are less likely to do paid work when they have a child in the household. Having a child under five decreases the log odds of unemployment and increases the log odds of being out of the labor force for men in different-sex couples, which is unexpected (pp. 204-5, Table A1). For same-sex couples, the presence of a child under five in the household lowers the log odds of being unemployed for both men and women in same-sex couples (a logical association in the sense that there may be a selection bias of high-earning/employed same-sex couples into parenthood; see the first paper in this dissertation), and the presence of children in the household increases the log odds of men in same-sex couples being out of the labor force. Children do not appear to have a

significant impact on the odds of being out of the labor force versus being employed for women in same-sex couples, suggesting little or no division of labor in female same-sex couples, but perhaps some division of labor in male same-sex couples.¹⁵

Using CPS data from 2001, Tebaldi & Elmslie (2006) find that the presence of children (any people under 18) in a household decreases the number of hours in paid work performed by men and women in same-sex couples. In other words, the presence of children shifts the labor of people in same-sex couples from paid into unpaid work.¹⁶ However, this finding does not say anything about how the child might affect the two partners' labor supplies differently. Indeed the studies by Elmslie & Tebaldi (2006), Leppel (2009) and Jepsen (2007) all suffer from this drawback: splitting the sample of people in same-sex couples into two groups, by for example higher/lower earner or position on the household roster, would be more informative about how children would affect couple members' labor supply and wages, because children may affect the labor supply and wages of the two people in a couple differently (see also the first paper in this dissertation). Antecol & Steinberger (2013) rectify this problem in their study of the relationship between children and labor supply.

Antecol & Steinberger (2013) analyze the labor supply of lesbian versus straight women using 2000 Census data, concentrating on the role of children in explaining the

¹⁵ Leppel's (2009) study is problematic in the sense that she does not account for the fact that the sample of same-sex couples is contaminated by unmarried different-sex couples (see Black *et al.* 2007b). It is therefore not clear if the results of the analysis are valid.

¹⁶ The study conducted by Tebaldi & Elmslie (2006) is flawed because the authors identify LGB people as people in the same household who are "unrelated and unmarried same-sex partners cohabiting whose age is 25 years or older" (p. 554). They work with a sample of 828 lesbian or gay couples, out of a total sample of 42,457 individuals. However, in the 2001 March CPS there are only 49 gay male couples and 63 lesbian couples who identify themselves as "unmarried partners" – less than one-tenth of one percent of the whole sample, a count much closer to that found in other studies of the LGB population (Black *et al.* 2000; Gates and Ost 2004). Tebaldi and Elmslie consider *any* unmarried adults of the same sex living together as LGB couples, including those who might consider each other just friends or roommates, clearly not a true sample of LGB people or couples.

sexual orientation labor supply gap. As a whole, lesbians supply much more labor than straight women at both the extensive margin (the decision to participate in the labor market at all) and the intensive margin (the number of hours worked, conditional on supplying some positive number of hours of labor). Antecol & Steinberger divide their sample into primary (higher) earner lesbians and secondary (lower) earner lesbians, and find that not only do the primary partners provide more labor than the secondary partners (who still provide more labor than straight women), but further that motherhood has less of an effect on the labor supply of lesbians than straight women and less on the labor supply of primary lesbians than on secondary lesbians. Having children in the household accounts for a much larger portion of the mean labor supply gap between (straight) married women and secondary lesbian earners (56%) than between (straight) married women and primary lesbian earners (15%); straight women's labor supply is more similar to one group of lesbians (the secondary earners) than another (the primary earners). A parallel story emerges when the sample of lesbians is split into the primary and secondary group using a definition of primary and secondary based on the household roster – the householder (or first person listed on the survey) is the primary partner, while her “unmarried partner” is the secondary partner. Motherhood has a very different effect on the labor supplies of primary versus secondary lesbians, wherein the secondary lesbians respond to children being present in the household in a manner much more similar to straight married women than the primary lesbians (whose labor market supply looks much more like married men's). These findings suggest that lesbian couples engage in some degree of household specialization, because the presence of children in the household corresponds with one – and only one – partner reducing the time she spends in

paid work. The study done by Antecol & Steinberger (2013) therefore provides a strong hint that female same-sex couples engage in at least some degree of specialization.

Giddings *et al.* (2013) analyze the role of children in the division of labor in same-sex couples using American Community Survey data pooled from 2005 to 2009 to test for differences in household specialization. The authors define a couple's degree of specialization as (1) the probability of both members of a couple working or working full-time (a higher probability that both partners work signals less specialization) and (2) the absolute difference in the hours worked of the two people in the couple (a larger difference in the number of hours worked indicates greater specialization), across couples of different sexual orientation/gender compositions. The authors find that same-sex couples have a lower average difference in hours worked among couple members and are more likely to have both people doing paid work, but that these differences (what the authors call the "specialization gap") is lower in households with younger couples and households with children present. Same-sex couples without children are less likely to have a household division of labor into paid and unpaid work than different-sex couples, but the presence of children makes same-sex couples just as likely as different-sex couples to specialize. Giddings *et al.* (2013) therefore show that children are important drivers of specialization in both same-sex couples and different-sex couples.

The present study builds on the insights from the work and theory discussed above, which suggests that there could be a household division of labor in same-sex couples into paid versus unpaid work, and tests several hypotheses that would explain specialization in different work by the people in these couples. In particular, I test the role of comparative advantages and bargaining power, gender roles, and institutional

constraints in predicting the number of minutes spent in different types of work for people in same-sex and different-sex couples. I hypothesize that in different-sex couples, a person's gender will be the strongest predictor of time spent in paid work (done more by men), household work, care work, and supervisory care work (done more by women). In same-sex couples, I hypothesize that comparative advantages and bargaining power based on race, ethnicity, education, age, and income will be predictors of time spent in different types of work, where the person who is more highly educated, older, white (in an interracial couple), non-Hispanic (in an inter-ethnic couple), and who has higher income will do more paid work and less unpaid work. Further, I expect that gender roles, represented by the share of men in a person's same occupation and industry, will play a significant role in determining the number of minutes spent in different types of work, where a more masculine gender role will be associated with less unpaid work and more time in paid work. Finally, I expect that people in same-sex couples who lived in a state which allowed marriage or a marriage-like arrangement for same-sex couples at the time of their interview would be more likely to specialize into paid or unpaid work, depending on the relative income of both partners. I expect that the higher earner in couples with access to marriage or a marriage-like institution would do more paid work and vice versa). The next section describes the data employed and methodological approaches used to test these hypotheses.

Data and Methods

All previous empirical studies of the division of labor in same-sex couples in economics have modeled specialization in paid work as some measure of a person's hours worked

for pay relative to their partner's hours in paid work. A drawback to that approach is that it does not include any information regarding the time people spend in household and care work; it must not automatically be the case that the person who works fewer hours for pay will necessarily spend more hours doing home production. An ideal dataset would therefore include information on the time each member of a couple spends in *both* labor market activities on the one hand and household and care work on the other.

The American Time Use Survey (ATUS) collects data which bring us closer to this ideal. Participants in the ATUS are asked to write a diary of activities in which they participated on the previous day, including the travel time associated with the activity. ATUS respondents are individuals from households who had previously participated in at least one month of the Current Population Survey (CPS) and have no remaining rotations in the CPS cycle. The data collected from the CPS are linked to the time use data from the ATUS. Therefore, researchers using the ATUS have access to not just time use data, but to the wealth of demographic and economic data about all members of the household from the CPS. This study uses ATUS data pooled from 2003-2011, accessed via the ATUS-X service of the Integrated Public Use Microdata Series (IPUMS) (Abraham *et al.* 2011).

There are several concerns regarding the use of ATUS data to study a household division of household into paid and unpaid work. Time use data are not perfect and there are some clearly documented biases in the data. One concern, for example, is that time use survey respondents consistently show different responses to questions about household work than respondents who complete stylized reports. Stylized reports ask respondents how much time they spent on a specific activity during a certain period of

time, while time use surveys report all activities in which respondents participated, in temporal order, during a particular day. In the US, stylized reports often yield higher average values for time spent in housework than the survey method (Press and Townsley 1998; Bianchi *et al.* 2000; Juster *et al.* 2003). Press and Townsley (1998) find that several factors affect the gap between the stylized and survey reports, namely, gender attitudes, total housework done by all household members, income class, respondent education level, household income, family size, and respondent employment status. They conclude that the stylized report is sensitive to social expectations about who “should” do housework. In this case, we should feel more comfortable using a time use survey, but it remains unclear how accurate the reporting on these surveys is.

In analyzing the accuracy of respondent reports of time spent on household work in recall data such as those collected by the ATUS, Robinson and Godbey (1997) show that there is a positive, somewhat strong (80 percent) correlation between a respondent’s recollection of their time spent in household work on the previous day with what the respondents recorded doing when they were randomly paged and asked to write down what they were doing in the moment that moment. Robinson & Godbey (1997) also find that the respondents’ spouse agreed with the respondents’ reports of their time spent in household work approximately 80 percent of the time. Michelson (2005, p. 38) says, “although no one finds that time-use data are flawless, the consensus is that they approximate reality more closely than alternatives.” Further, while Gershuny (2000, p. 106) acknowledges that “individuals sometimes slant their accounts, as for example husbands exaggerating or wives minimizing accounts of male domestic work in surveys

concerned with the domestic division of labor,” he argues that it is not “in principle less acceptable than any other form of questionnaire data.”

Even to the extent that it provides accurate (enough) data on time spent in household work, there is a large drawback to using ATUS data for the present study. While demographic and economic data from the CPS are available for each household member in the participating households, only one person from each CPS household is solicited for participation in the ATUS. This means that the ATUS contains time use data on only one CPS household member, instead of both members of a couple, as would be ideal. Nevertheless we can employ ATUS data to study which personal and couple characteristics are related to time spent in paid and unpaid work for persons in different couple types.

While the ATUS and CPS do not directly solicit data on their respondents’ sexual orientation, it is possible to locate people who are in same-sex and different-sex couples by using the “relationship category” variable (variable name “relate” in the ATUS) and information on the gender of all household members. ATUS participants who identify a “spouse” or an “unmarried partner” of the same sex are considered to be in same-sex couples; married and unmarried different-sex couples are identified in the same manner, but with different-sex partners.

There are therefore four different couple types identifiable in the survey: different-sex married; different-sex unmarried; same-sex male; and same-sex female. I investigate time spent in four different types of work by people in these different couple types. The four types of work are “paid work,” which includes all time spend doing work or work related activities (e.g. checking email at work; enrolling in training); “household

work,” which includes, for example, interior and exterior maintenance, food preparation, and cleaning; “care work,” which is time spent caring for children or adults who live in the household, and includes activities such as giving a bath or taking the person to a doctor; and “supervisory care work,” which is all time spent doing any activity during which there was a child under 13 in the respondent’s care. All calculations include the time spent traveling related to the work being done.

To analyze the role of comparative advantages, bargaining power, institutional constraints, and gender roles in the amount of time spent in household work, care work, supervisory care work, and paid work, I do means comparative testing and use an OLS regression to predict the number of minutes spent in the various tasks based on a range of proxies for the four explanations of a household division of labor into paid and unpaid work. A dummy variable for living in a state in which same-sex couples can legally marry or can enter a legal domestic partnership with rights similar to marriage at the time that the time-use interview was given captures the role of institutional constraints in household division of work decisions. The date in which same-sex couples were granted access to marriage or a marriage-like institution by state are given in appendix table A2. Since a division of labor is economically risky for the person who does less paid work than his or her partner, marriage and civil unions should serve as legal protection for the person doing more household and care work. People in same-sex couples may be more willing and able to specialize if they are protected by marriage or legal partnership. I therefore interact living in a state with access to marriage or a marriage-like institution with being the lower earner in a couple, to see if the access to the legal protections of marriage make the lower earner more likely to spend more time in household work.

There are no data in the ATUS or CPS about a respondent's gender role identification. I make a proxy for one's gender role identity by taking the percentage of people working in the same occupation and industry who are men; perhaps people working mainly with men or in a "man's job" are more likely to play the stereotypical role at home of doing less housework and care work. Some particularly male-dominated fields with at least 50 employees are installation, maintenance and repair in the construction industry (98.4% men) and in the repair industry (97.7% men); some female-dominated jobs are cleaning and maintenance in private households (95.0% women) and education, training and library jobs in the social assistance industry (96.0% women).

A comparative advantage in household work, care work, and supervisory care work is captured by having a lower market wage than one's partner. Biological parenthood would be an ideal variable to study Becker's comparative advantage hypothesis, but there is not information about biological parenthood in the ATUS or CPS data. I therefore use a dummy variable indicating that the respondent has an "own" child und 13 in the household, where this child could be a biological, adopted, or step-child, as well as an interaction term between being the lower earner in a couple and having a child present as an indication of a comparative advantage in household and care work.

The rest of the variables serve as some indicator of bargaining power within a couple. As Oreffice (2011) showed, the younger person in same-sex couples may have more bargaining power than their partner; I therefore include a dummy variable for being the older person in a couple. Because the age difference between the two people in same-sex partnerships are usually larger than in different-sex couples, I control for the effect of the absolute age difference in the couple. A person's absolute age is also included in the

model, since bargaining power may change with age, even holding couple-level characteristics constant. For example, a person may become more confident or secure with age, meaning that their ability to bargain would increase with age.

Bargaining power might also be related to a person's educational attainment relative to their partner's; I include a dummy variable for being the less-educated partner. Finally, the person of color in an interracial or interethnic (Hispanic and non-Hispanic) couple with a white or non-Hispanic partner may have less bargaining power in the household because of the discrimination they face in the labor market. Their household bargaining power may be even further negatively affected if they are the lower earner in the couple. I therefore include dummy variables for being the person of color in an interracial or interethnic couple and well as interaction terms of being the person of color and having lower earnings than the partner.

The sample sizes (and mean values for the dependent and independent variables of interest) are in table 1. After dropping households with a data quality flag (a total 866 from the 124,517 time use respondents), the sample of 141 men and 177 women in same-sex couples was further reduced to 111 and 132, respectively, because some information for some respondents was missing. The sample of men (women) in different-sex married couples fell from 29,889 (33,190) to 23,196 (20,286) after eliminating observations with missing data; the counts are 1,643 (1,818) men (women) to 1,176 (1,207) in different-sex unmarried couples.

The means in table 2.1 allow us to get an initial sense of the amount of time spent in different types of work in the four couple types. On average, the women in different-sex couples in this sample spend fewer minutes in paid work (300 minutes for married

straight women; 326 minutes for unmarried straight women) and more minutes in household and care work, not including supervisory care time (a combined 153 minutes for married straight women and 146 minutes for unmarried straight women) than the men in different-sex couples (almost 390 minutes of paid work and less than 70 minutes for care work and household work for both married and unmarried straight men). Women in different-sex couples spend between 70 (unmarried) and 100 (married) more minutes per day in supervisory care time than men in these couples.

From the amount of time spent in paid work, it appears that men in same-sex couples may have a rather equal distribution of labor in their couple, since the mean number of minutes spent in paid work (343) falls between the mean for men and women in different-sex couples (388 and 313, respectively). Women in same-sex couples, however, spend a very high number of minutes in paid work on average (391), suggesting that both partners in same-sex female couples are responsible for doing paid work. Men and women in same-sex couples also appear to be equally responsible for household work, on average, as their minutes spent in household work (29 for men; 26 for women) fall between the average of the men and in different-sex couples (13 for men and 47 for women).

Although it is mostly children who are the recipients of others' care work time, household members can also care for adults. Appendix table A3 shows, however, that time spent caring for household adults is rather minimal compared to the number of minutes spent doing caring labor for children. Therefore, the rest of the analysis in this paper concentrates on time spent in caring for children; care work is defined as the minutes spent doing care work for household children.

In households with children, men in same-sex couples spend a bit more time doing care work than men in different-sex couples with children (81 versus 70 minutes), but still not as much as women in any couple type spend on care work. Since the women in different-sex couples do more care work than the men, it is unclear where the extra care work time in same-sex male couples is being made up. In same-sex male couples, there are two men performing 81 minutes of care of (sum=162), while in different-sex married couples, the sum of the average care work time is $70+121=191$. Perhaps male couples make up for the “missing” care time by outsourcing the care work for their children (to daycares or babysitters) more often.

Women in same-sex couples also spend more time in care work than their same-gender counterparts in different sex couples (149 versus 119), which means that there is, on average, an abundance of care work done in same-sex female couples ($149+149=298$ total minutes of care work per day, compared to the 162 minutes in different-sex couples). This may be the case because both women feel compelled to do the care work, since they have been socialized (as women) to do that labor.

However, both men and women in same-sex couples spend less time than their same-gender counterparts in different-sex couples in supervisory care work. This finding suggests that people in same-sex couples may spend more time in activities *with* their children, instead of activities in which the child is merely present. The sum of the total time spent in care work, both as a main activity and in supervisory care time, shows that men in same-sex couples spend about the same amount of time in care as men in different-sex couples (339 for straight married: 332 for straight unmarried; 328 for gay) while women in same-sex couples spend much more time than women in different-sex

couples on care work (490 for straight married; 453 for straight unmarried; 469 for lesbian).

The other means in table 2.1 are consistent with the literature on the economics and demographics of same-sex couples. People in same-sex couples are on average more educated than people in different-sex couples (14.9 years for men in same-sex couples versus 13.9 (13.1) for men in different-sex married (unmarried) couples; 15.3 years for women in same-sex couples versus 14.2 (13.6) for women in different-sex married (unmarried) couples). People in same-sex couples are younger than married different-sex couples but older than unmarried different-sex couples: men in same-sex couples are 40.7 compared to different-sex married (unmarried) men who are 45.2 (35.9) years old; women in same-sex couples are 41.4 compared to different-sex married (unmarried) women who are 44.1 (34.2) years old. Same-sex couples, particularly female couples, are more likely to live in a state which recognizes same-sex marriage or has other marriage-like institutions available to same-sex couples. Same-sex couples are less likely than different-sex couples to have children under 13 in the household (about 16 percent of same-sex female compared to about 37 (26) percent of different-sex married (unmarried) couples), and a particularly low percent (6) of same-sex male couples have children in the household. On average, people in same-sex couples are less likely to work in occupations and industries dominated by either men or women, although women in same-sex couples work in more male-dominated jobs than women in different-sex couples do, and men in same-sex couples work in more female-dominated jobs than men in different-sex couples do. Same-sex couples are more likely than different-sex married couples to be interracial or interethnic; male same-sex couples are particularly racially and ethnically diverse.

Thirteen percent of male same-sex couples are interracial and/or interethnic, compared to about 4 percent of different-sex married couples, 6-7 percent of female same-sex couples, and 8-10 percent of different-sex unmarried couples. The earnings of the people in same-sex couples in this sample are unusually high; the women in same-sex couples earn more than even men in different-sex couples (\$873 versus \$789 per week), a pattern which has not been reported in any study employing larger datasets. Finally, the Hispanic partner in same-sex interethnic couples is usually the lower earner in their couple (in 83.5% of interethnic male couples, the Hispanic person is the lower earner; the Hispanic person is the lower earner in 57.2% of interethnic female same-sex couples).

The means in table 2.1 do not divide the sample of people in same-sex couples in any way. In order to get a sense of which observable characteristics may be associated with specialization decisions in same-sex couples, I now turn to tests of time spent in different tasks for split samples of couples. In table 2.2, I report the mean number of minutes spent in paid work, household work, care work, and supervisory care work (the latter two categories for households with at least one child in them) for people in the four couple types. I divide the samples of couples in four ways: the higher/lower earner; the older/younger person; the more/less educated partner; and the person of color/white in interracial couples. While we cannot observe the time spent in different work by two people in any one couple, table 2 reports the mean minutes spent in tasks for all people of a certain category (e.g. younger; higher earner) in the same couple type. Note that the means reported are only reported for people in couples where there is a difference in the characteristic in question within the couple; couples where both people have the same educational attainment, for example, are excluded from panel 3, which divides couples by

educational attainment.

The results in table 2.2 show that there appears to be at least some degree of specialization based on income, education, age, and racial differences in same-sex couples as well as different-sex couples. In all couple types, higher earners do more paid work and less care and household work, consistent with the comparative advantage and bargaining power models. Similarly, in same-sex and different-sex couples alike, more highly educated partners do more paid work and less household work, although those differences are not statistically significant in any couple other than different-sex married couples.

While educational attainment differences seem to make no difference in the amount of care work (both direct and supervisory) done by people in different-sex couples, it is less educated partners in male same-sex couples and more highly educated partners in female same-sex couples who does more direct care work. The more highly educated partners in same-sex male couples do significantly more supervisory care work than the lower educated male partners.

In all couple types, the younger partners do more care work (both direct and supervisory), but in same-sex male couples, the younger partners do less supervisory care work. There is no clear pattern between age and household work or paid work. Finally, the white partners in interracial same-sex couples do more paid work, the difference is very large in the case of same-sex female couples. However, the very small number of interracial same-sex couples in these data (only 12 men and 10 women in same-sex couples are in interracial couples) make any comparisons statistically weak. Further, only one man and one woman in an interracial same-sex couple has a child under 13 in the

household; it is therefore impossible to make any comparisons of time spent in care work for interracial same-sex couples.

The univariate means in tables 2 hint that there is at least some degree of specialization in paid or unpaid work in same-sex couples; there are significantly different means for time spent in the various types of work for people with different characteristics in same-sex couples. However, these means – based on differences in only one variable – may be correlated with differences in other variables which are not held constant across the two groups being compared. In order to measure the relationship between the dependent variable (minutes spent in particular work) and any one independent variable (e.g. being the lower earner in a couple), I model

$$y_{it} = \alpha_t + \beta_t X_{it}^c + \varepsilon_{it} \quad (2.1)$$

where y is the number of minutes spent in the three different tasks t for person i of couple type c and X_i^c is the vector of control variables. This multivariate model allows us to see the relationship between the dependent variable and any independent variable, keeping all other independent variables constant. It allows us to get a sense of which of the independent variables play a role in determining the distribution of labor in the three couple types. Results are discussed in the next section.

Multivariate OLS Results

The results of the OLS regressions in equation (2.1) are presented in tables 2.3-2.6. There are models in the appendix for different-sex couples only, in which a dummy variable for being female is included. As shown in appendix table B1, gender is the main predictor of time spent in various tasks in different-sex couples. Since this analysis is

obviously not possible for same-sex couples, I interpret the findings of the model without a gender dummy variable in the text.

Even a quick glance at tables 2.3-2.6 shows that there is not much statistical significance in the results predicting time spent on various tasks in same-sex couples. This fact is of course due to the small sample size of same-sex couples and relatively large variance in answers. Nevertheless, we can see some general trends from the models, and I interpret the coefficients as meaningful averages for the populations; even when these point estimates are not statistically significant, we can still understand them to be economically and socially significant.

Table 2.3 shows the model predicting the number of minutes spent in paid work. By the constant terms for the different populations, we can see that on average, men spend more time in paid work than women do; this is also true for men and women in same-sex couples.

For both men and women in different-sex couples, working in an occupation and industry with a larger share of men – our proxy for playing a masculine gender role – is correlated with spending more time in paid work. This finding is especially true for women. In same-sex couples, the gender composition of one's occupation and industry has basically no effect on time in paid work. Higher weekly earnings are generally positively correlated with time spent in paid work; the more one earns, the more one works, and vice versa.

The findings of the bargaining power variables are mostly in line with the theory discussed above. Although this finding must be interpreted with caution because of the very small sample size, the person of color in an interracial same-sex female couple does

less paid labor than her partner, and males of color in same-sex couples do less paid work than their partners when they are also the lower earner. To the extent that time away from the labor market translates into time spent in household work, this result is in line with our theory that the lower-earner and/or person of color would have less bargaining power in the household and therefore do more housework and less paid work. The work patterns of interracial and interethnic different-sex couples do not tell as consistent a story as in the same-sex couples, leaving the possibility that a division of labor in different-sex couples is not based on race or ethnicity (and their interaction with earnings) because gender plays a more important role there, but in same-sex couples, race, ethnicity, and earnings serve as important differentiating characteristics upon which couples might construct a division of labor. The other bargaining power variable, relative (to one's partner) age, is not in line with the theory above, or the findings in Oreffice (2011). In this model, the older partner in unmarried couples does less paid work.

The variable used to capture the institutional constraints of marriage gives the expected sign for men in same-sex couples. The lower earner in same-sex couples who lived in states with same-sex marriage or a marriage-like institution at the time of the ATUS interview spent less time in paid work than other people in same-sex couples. This finding suggests that these people may be taking advantage of the legal protections of marriage/civil partnership available to them, and are specializing in unpaid work. These data are of course only one-day observations, which means that we may not be able to reasonably interpret these results as an indication that couples specialize every day. However, if we assume that the data are representative of the respondents' typical days, we can interpret these results as indications (or rejections) of specialization.

Table 2.4 shows the results of the OLS model predicting the number of minutes spent in household work for the respondents in the various couple types. These results generally support the findings of the model predicting time spent in paid work, but with opposite signs (as more time in paid work is associated with less time in household work). The variable used to capture the effects of institutional constraints on the division of labor in same-sex couples, namely the limited access to marriage, shows that the lower earner in a same-sex couple does more household work when the couple lives in a state which gives legal recognition to same-sex partnership, especially in same-sex male couples. Again, these couples may be taking advantage of the legal protection of these institutions to benefit from a division of labor. However, the presence of children does not seem to enhance this finding; when children are in the household, the respondents in same-sex male couples do spend more time in household work, and the relative earnings of the couple members does not predict which partner takes on more household work when there is a child present, as our theory predicted. In different-sex married households, the opposite is true: there, the lower earner does slightly more household work when there is a child present – especially when the lower earner is a woman – which is in line with Becker’s comparative advantage theory.

The variable used to look at one’s gender identity shows the expected results for people in every couple type except same-sex female couples: working in a more male-dominated industry and occupation is correlated with doing less household work. For women in same-sex couples, working in a more male-dominated job is weakly correlated with more household work and more paid work (table 2.3). This finding suggests that women in same-sex couples who may take on a masculine gender role at work are still

committed to equality in the amount of time spent on household work. For people in the other couple types, the findings in table 2.4 show that working in a more masculine job has a small but negative relationship with time spent in household work, potentially because of the gender roles socialized at work which are then brought into the household, or possibly because the work is more exhausting or has more overtime requirements.

The bargaining power variables show the same trends that were observed in table 3. Simply being the lower earner does not correspond with doing more household work in and of itself, but in same-sex couples, when the lower earner is a person of color in an interracial or interethnic couple, that person takes on more of the housework. Again, it is not the case in different-sex couples that the intersection between earnings and race and ethnic differences plays an important role in determining the work patterns of the couple; this may be because different-sex couples divide their work based on biological sex differences while same-sex couples do so based on earnings and race and ethnicity. The bargaining power available to whites in same-sex interracial or interethnic couples appears to be stronger. Further, the less educated person in same-sex male couples does more household work, suggesting the bargaining power based on educational attainment does indeed work in the directions predicted in the theory for some same-sex couples.

To get a better sense of the role of children and comparative advantages in the division of labor in same-sex couples, we use the model in equation (2.1) above to predict the number of minutes spent in care work in households with at least one child present. The results are in table 2.5 and largely confirm the results in the other two models.

The first check of the relevance of institutional constraints on the amount of time spent in care work for same-sex couples with children shows that there is a positive

relationship between the time spent in care work and being the lower earner in a same-sex couple in a state which allows marriage or civil unions. This finding, consistent in all three models, suggests that marriage or marriage-like rights may be quite important for the work decisions of same sex couples and can encourage, through legal protection, a household division of labor into paid and unpaid work.

A proxy for gender role performance shows that for women in same-sex couples, working in an occupation and industry with a higher share of men is associated with spending less time in care work, which is the result our theory predicted.

The test of the role of comparative advantage in terms of earnings shows that relative earnings in a couple do not predict the amount of time spent in household work in same-sex couples. Indeed in same-sex couples, having lower earnings is associated with doing less care work – the opposite of Becker’s prediction of how care work would be distributed.

The other variables indicating bargaining power within a couple show that the older person in same-sex male couples does more care work than their partners. The older partner in same-sex couples is more likely to do both paid work and less likely to do household and caring work. To the extent that unpaid work might be less interesting or desirable than labor market work, it appears that the older partner has more bargaining power in same-sex male couples. Finally, in all couple types except for same-sex female couples, the less educated partner does more of the care work, which again shows that the comparative advantage/bargaining power model is not a very strong predictor of work decisions in same-sex female couples, but that it may be a better model for predicting the specialization decisions of same-sex male couples.

Finally, table 2.6 presents the results of the model predicting the time spent in supervisory care work for people in the different couple types with at least one child at home. Some key findings of the other models are confirmed here: being the lower earner in a couple who had access to marriage or a marriage-like institution at the time of the ATUS interview is strongly correlated with more time in supervisory care work, especially in same-sex male couples. In contrast, the lower earner in a same-sex couple who did not have access to marriage or a marriage-like institution is likely to spend less time in supervisory care work than their higher-earning partner. The older partner in same-sex couples is likely to spend more time in supervisory care work as in direct care work. The person of color in same-sex female interracial or interethnic couples is more likely to spend time in supervisory care work than her partner. Finally, the lower educated partner in male same-sex couples does more supervisory care work, while it is the more highly educated partner in female same-sex couples who spends more time on supervisory care work.

Discussion and Conclusions

The analysis presented in this paper suggests two important findings. First, from the means of minutes spent in housework, paid work, care work, and supervisory care work for men in women in different couple types, it appears that same-sex couples may have one person specialize in paid work and the other in unpaid work. The findings suggest that same-sex couples assign specialized roles based on relative (to their partner) income, education, age, and race, but less so than in different-sex couples.

A second important finding is that the working decisions of same-sex couples

may be affected by their institutional surroundings. When same-sex couples live in a state which grants legal recognition for marriage or a marriage-like institution, the lower earner in both male and female same-sex couples spends more time in housework and childcare work. This finding suggests that same-sex couples take advantage of the legal protections of these institutions, and increase their efficiency by having partners specialize in various tasks. Household specialization is economically and socially risky, and marriage rights for same-sex couples would offer some protection from the risks.

Appendix table B1 shows that gender differences – especially biological sex differences but also in socially constructed gender roles, as modeled through the share of men in a person's occupation and industry – are the strongest predictor of the time members of a different-sex couple will spend in various tasks. This study has started an investigation which suggests that the fact that same-sex couples are not composed of two people of different sexes does not mean that their decisions about work are random. The findings in this study show that earnings, race and ethnicity, and the institutional political setting of the availability of marriage rights, are relevant factors in a same-sex couple's decision of how to distribute their work responsibilities.

One obvious shortcoming of this study is the very small number of observations for people in same-sex couples in the ATUS data. Since same-sex couples are not only interesting to study in and of themselves but also provide the possibility to study the construction of relations of inequality within couples, researchers should demand continued and expanded data collection on this population. Further research on the division of labor in same-sex couples would further benefit from the inclusion of qualitative data.

Table 2.1: Descriptive Statistics for Couples in ATUS, 2003-2011

	(1)	(2)	(3)	(4)	(5)	(6)
	Different-Sex Married Men	Different-Sex Married Women	Different-Sex Unmarried Men	Different-Sex Unmarried Women	Same-Sex Men	Same-Sex Women
Time Spent, in minutes...						
Paid Work Time	387.0 (2.362)	300.3 (2.378)	389.2 (10.068)	325.7** (9.685)	343.1 (31.604)	391.4*** (30.683)
Household Work Time	12.2 (0.337)	53.2 (0.757)	14.5 (1.555)	41.3*** (2.675)	28.6** (6.744)	26.2*** (5.489)
Care Work Time	70.2 (1.134)	121.2 (1.452)	69.1 (6.198)	116.9 (7.479)	81.1 (51.336)	149.2 (27.553)
Supervisory Care Time	269.0 (2.515)	369.1 (2.890)	263.2 (12.206)	336.2** (17.266)	247.3 (112.654)	319.6 (53.045)
Means of...						
Respondents living in a State with Marriage Rights	20.9 (0.004)	20.2 (0.004)	21.6 (0.016)	24.7*** (0.016)	27.0 (0.053)	34.4*** (0.057)
Any Children under 13 in Household	43.4 (0.004)	37.2 (0.004)	24.4*** (0.015)	26.8*** (0.015)	6.0*** (0.027)	15.9*** (0.034)
Percent Men in Job	66.2 (0.002)	33.7 (0.002)	67.4 (0.009)	35.1* (0.008)	48.7*** (0.025)	42.8*** (0.027)
Weekly Earnings	788.8 (5.119)	600.0 (4.461)	616.2*** (15.852)	554.9*** (16.185)	876.2 (79.468)	872.6*** (64.513)
Lower Earner	22.6 (0.004)	48.7 (0.005)	26.8** (0.017)	48.5 (0.019)	38.5**** (0.055)	37.5** (0.055)
Absolute Age	45.2 (0.105)	44.1 (0.109)	34.9*** (0.432)	34.2*** (0.434)	40.7*** (1.259)	41.4** (1.289)
Older Partner	63.8 (0.004)	20.1 (0.004)	58.5*** (0.020)	25.7*** (0.016)	32.5*** (0.052)	48.6*** (0.057)
Age Difference	3.5 (0.030)	3.8 (0.037)	4.4*** (0.160)	4.6*** (0.184)	6.3*** (0.772)	5.0** (0.666)
Years of Education	13.9 (0.028)	14.2 (0.025)	13.0*** (0.089)	13.6*** (0.113)	14.9*** (0.372)	15.3** (0.464)
Interracial Couples	4.3 (0.002)	4.3 (0.002)	9.6*** (0.010)	9.9*** (0.001)	12.8* (0.044)	5.6 (0.020)
Lower Earner Not White in Interracial Couple	22.3 (0.022)	49.3 (0.030)	29.5 (0.056)	48.2 (0.094)	28.6 (0.189)	40.6 (0.215)
Interethnic	4.3 (0.002)	4.2 (0.002)	8.8** (0.010)	8.1** (0.010)	12.6** (0.034)	6.8 (0.022)
Lower Earner Hispanic in Interethnic Couple	23.9 (0.026)	51.6 (0.029)	32.8 (0.077)	49.0 (0.102)	83.5*** (0.133)	57.2 (0.215)
Interviewed on Holiday	1.7 (0.001)	1.6 (0.001)	1.3 (0.003)	0.8*** (0.002)	0 ---	2.2 (0.022)
Interviewed on Weekend	28.4 (0.003)	28.7 (0.003)	28.2 (0.014)	26.2* (0.013)	35.2 (0.050)	26.7 (0.041)
Observations	23196	20286	1176	1207	111	132

Notes: A statistically significant difference in means between columns 3 and 5 versus 1, and 4 and 6 versus 2 is indicated by * ($p < 0.10$), ** ($p < 0.05$), or *** ($p < 0.01$).

Table 2.2: Mean Number of Minutes Spent in Different Types of Work, Within Various Couple Types

	Different-Sex Married		Different-Sex Unmarried		Same-Sex Men		Same-Sex Women	
	Higher Earner	Lower Earner	Higher Earner	Lower Earner	Higher Earner	Lower Earner	Higher Earner	Lower Earner
Paid Work Time	363.9	321.2***	363.9	347.0	421.6	265.1**	424.3	333.0
	(2.324)	(2.800)	(9.597)	(11.500)	(36.481)	(55.084)	(37.098)	(54.459)
Care Work Time	79.7	109.9***	81.7	108.7***	20.7	170.8	200.0	123.8
	(1.200)	(1.610)	(6.230)	(8.902)	(18.079)	(94.849)	(41.188)	(35.967)
Household Work Time	25.3	39.8***	22.5	33.8***	10.7	58.3***	14.3	35.8**
	(0.510)	(0.737)	(1.714)	(2.845)	(5.545)	(13.988)	(5.375)	(9.581)
Supervisory Care Work T	287.8	345.4***	290.6	313.6	201.5	360.1	283.7	333.9
	(2.575)	(3.276)	(15.521)	(15.046)	(167.999)	(62.661)	(40.805)	(80.222)
	Older	Younger	Older	Younger	Older	Younger	Older	Younger
Paid Work Time	370.4	324.2***	359.9	345.4	211.0	395.5***	389.9	356.3
	(2.582)	(2.588)	(11.072)	(10.149)	(49.589)	(41.226)	(42.443)	(52.108)
Care Work Time	77.7	104.2***	84.4	104.3*	48.8	350.0***	128.5	191.4
	(1.331)	(1.468)	(6.559)	(8.663)	(13.630)	---	(33.384)	(53.604)
Household Work Time	20.4	14.1***	23.4	33.1***	42.8	21.3	27.3	31.0
	(0.517)	(0.693)	(2.046)	(2.616)	(15.391)	(7.607)	(8.578)	(8.895)
Supervisory Care Work T	286.8	336.2***	292.8	293.0	553.9	465.0	432.8	290.4
	(2.815)	(3.116)	(13.512)	(11.887)	(129.583)	---	(81.288)	(40.169)
	Higher Education	Lower Education	Higher Education	Lower Education	Higher Education	Lower Education	Higher Education	Lower Education
Paid Work Time	357.2	344.6***	350.1	343.6	361.1	291.1	459.7	424.0
	(3.208)	(3.579)	(14.375)	(15.703)	(64.225)	(57.311)	(65.834)	(49.392)
Care Work Time	97.5	93.6	109.2	110.3	36.3	194.1*	223.9	140.2
	(1.659)	(2.139)	(9.754)	(14.148)	(24.716)	(78.634)	(74.167)	(21.756)
Household Work Time	29.2	32.0**	29.7	31.1	17.1	49.5*	14.6	25.7
	(0.707)	(0.916)	(3.375)	(4.043)	(6.555)	(16.948)	(4.779)	(9.038)
Supervisory Care Work T	315.3	304.5**	317.3	296.5	775.2	327.8***	331.0	265.9
	(3.723)	(3.962)	(35.247)	(17.528)	(44.137)	(85.216)	(93.471)	(42.779)
in interracial couples..	White Person	Person of Color	White Person	Person of Color	White Person	Person of Color	White Person	Person of Color
Paid Work Time	347.1	365.5	319.6	305.1	463.0	447.0	461.1	191.3***
	(12.545)	(11.204)	(33.184)	(27.840)	(79.344)	(127.802)	(17.343)	(96.625)
Care Work Time	109.0	90.0**	142.4	89.9*	70.0	---	---	135.0
	(6.282)	(5.170)	(24.126)	(17.382)	---	---	---	---
Household Work Time	29.3	24.5	27.5	19.5	7.5	38.1	---	38.4
	(2.514)	(1.918)	(5.356)	(5.961)	(6.636)	(35.572)	---	(32.780)
Supervisory Care Work T	328.3	290.8**	281.3	294.0	715.0	---	---	675.0
	(13.415)	(11.665)	(41.257)	(32.439)	---	---	---	---

Notes: Author's calculation on ATUS 2003-2011 data. Standard errors in parentheses. *, **, *** denotes a statistically significant difference in the number of minutes spent on a task by people in the same couple type at $p < .01$, .05, .10, respectively. Number of minutes spent in care work only for households with at least one child present.

Table 2.3: Predicting Minutes Spent in Paid Work

	Different-Sex Married Men	Different-Sex Married Women	Different- Sex Unmarried Men	Different-Sex Unmarried Women	Same-Sex Men	Same-Sex Women
State with Marriage Rights	-12.047*	-6.295	-19.600	-63.909**	-5.528	99.551**
	(6.223)	(7.763)	(27.040)	(29.927)	(55.922)	(50.773)
Marriage Rights* Lower Earner	16.655	-14.692	4.655	86.004**	-118.118	-141.335
	(12.044)	(10.795)	(56.974)	(39.651)	(103.555)	(119.081)
Percent Men in Job	11.860	48.182***	13.010	62.934	-24.531	52.126
	(8.858)	(9.667)	(37.570)	(42.130)	(133.039)	(109.572)
Absolute Weekly Earnings	0.012***	0.069***	0.039**	0.055**	0.039	0.151***
	(0.003)	(0.005)	(0.019)	(0.024)	(0.052)	(0.041)
Lower Earner in Couple	-16.100**	3.056	18.262	-0.764	22.402	38.376
	(7.861)	(6.018)	(27.482)	(24.486)	(98.177)	(78.120)
Absolute Age	-0.201	-0.768***	-0.202	0.846	2.187	1.186
	(0.261)	(0.255)	(0.879)	(0.883)	(2.556)	(1.896)
Older Person in Couple	1.559	6.144	-16.639	-7.364	-135.896**	-14.747
	(4.463)	(5.174)	(18.121)	(19.954)	(61.570)	(45.182)
Person of Color - Interracial	7.273	25.976	-36.408	-35.052	120.010	-210.152*
	(16.458)	(18.710)	(38.619)	(67.221)	(120.171)	(115.288)
Person of Color* Lower Earner	-36.626	-12.964	-43.156	10.229	-278.583*	75.800
	(34.939)	(27.513)	(67.982)	(97.248)	(166.102)	(191.544)
Hispanic - Interethnic	-16.693	1.022	-37.589	-64.739	-145.301**	-41.005
	(14.302)	(19.478)	(38.618)	(76.339)	(72.565)	(133.245)
Hispanic Interracial* Lower Earner	39.073	-7.589	31.411	71.534	106.728	103.668
	(31.964)	(26.841)	(58.670)	(91.130)	(139.621)	(197.464)
Lower Education	-2.139	-18.034***	-61.395***	36.996*	-22.008	94.230**
	(5.032)	(5.189)	(22.524)	(21.754)	(59.508)	(45.596)
Any Children Under 13	-3.434	-33.994***	-52.343**	-17.183	17.677	-12.561
	(5.262)	(5.487)	(21.097)	(22.412)	(99.426)	(69.923)
Lower Income*Children	5.672	-4.951*	13.258	-12.605	-50.909	54.910
	(3.985)	(2.897)	(13.947)	(13.163)	(61.706)	(41.701)
Interview on Holiday	-299.751***	-215.308***	-250.794***	-193.829**	0.000	-228.478**
	(16.089)	(14.986)	(52.625)	(77.519)	(.)	(102.897)
Interview on Weekend	-365.940***	-303.120***	-302.750***	-272.181***	-268.302***	-289.730***
	(3.803)	(3.610)	(17.540)	(15.768)	(62.027)	(49.116)
Constant	499.494***	387.315***	491.703***	331.063***	392.262**	221.765**
	(15.602)	(13.912)	(46.972)	(40.136)	(160.538)	(99.663)
Observations	22032	19723	1158	1196	110	129

Notes: Author's calculation on ATUS 2003-2011 data. Standard errors in parentheses. *, **, *** denotes p<.01, .05, .10 respectively.

Table 2.4: Predicting Minutes Spent in Housework

	Different-Sex Married Men	Different-Sex Married Women	Different-Sex Unmarried Men	Different-Sex Unmarried Women	Same-Sex Men	Same-Sex Women
State with Marriage Rights	0.997	2.742	3.549	-5.254	-19.308	-3.630
	(0.893)	(3.027)	(3.850)	(7.029)	(12.975)	(8.235)
Marriage Rights* Lower Earner	1.599	-0.119	3.383	-7.760	60.413*	23.888
	(1.819)	(3.873)	(9.977)	(9.882)	(31.449)	(17.739)
Percent Men in Job	-4.571***	-0.348	-2.117	-21.482*	-13.550	34.061
	(1.391)	(3.418)	(7.064)	(11.174)	(23.745)	(29.981)
Absolute Weekly Earnings	0.000	-0.015***	-0.000	-0.002	0.007	-0.007
	(0.001)	(0.002)	(0.004)	(0.007)	(0.008)	(0.011)
Lower Earner in Couple	0.559	5.315***	-1.939	-9.794	-9.458	-9.228
	(1.130)	(2.006)	(5.086)	(6.644)	(16.632)	(16.323)
Absolute Age	-0.100**	0.503***	0.160	1.212***	0.207	-0.444
	(0.046)	(0.077)	(0.149)	(0.224)	(0.406)	(0.501)
Older Person in Couple	0.093	-1.161	2.828	-6.298	15.476	-0.398
	(0.714)	(1.981)	(3.231)	(5.210)	(14.147)	(9.760)
Person of Color - Interracial	-0.746	-6.000	13.599	-13.531*	25.874	-23.008
	(2.195)	(5.474)	(11.168)	(7.294)	(21.723)	(16.978)
Person of Color* Lower Earner	2.100	-10.070	-16.348	-18.318*	55.899	89.286
	(4.051)	(6.745)	(16.792)	(9.675)	(78.527)	(65.808)
Hispanic - Interethnic	1.930	10.322	1.469	36.158**	-58.980***	-3.295
	(2.211)	(7.903)	(5.184)	(15.135)	(20.470)	(12.404)
Hispanic Interracial* Lower Earner	-4.578	-10.844	-18.204***	-4.371	131.603***	8.438
	(4.472)	(10.386)	(6.373)	(32.484)	(37.481)	(37.349)
Lower Education	0.153	5.502***	5.629	2.490	22.362	-7.254
	(0.762)	(1.998)	(4.524)	(7.343)	(15.707)	(12.835)
Any Children Under 13	0.997	4.970**	-1.490	9.289*	42.338*	-5.986
	(0.944)	(1.950)	(2.827)	(5.235)	(24.232)	(12.914)
Lower Income*Children	1.640***	5.124***	0.801	1.999	-5.320	0.598
	(0.603)	(1.114)	(2.790)	(3.154)	(11.081)	(16.639)
Interview on Holiday	3.881	5.970	8.030	-33.068***	0.000	99.478
	(2.716)	(6.595)	(12.462)	(7.168)	(.)	(115.490)
Interview on Weekend	13.615***	33.684***	8.539**	32.045***	41.319***	29.868**
	(0.752)	(1.538)	(3.500)	(5.190)	(14.017)	(12.747)
Constant	14.012***	22.353***	5.397	4.818	-8.618	31.362
	(2.758)	(4.201)	(7.168)	(10.388)	(22.959)	(26.588)
Observations	23196	20286	1176	1207	111	132

Notes: Author's calculation on ATUS 2003-2011 data. Standard errors in parentheses. *, **, *** denotes p<.01, .05, .10 respectively.

Table 2.5: Predicting Minutes Spent in Care Work

	Different-Sex Married Men	Different-Sex Married Women	Different-Sex Unmarried Men	Different-Sex Unmarried Women	Same-Sex Men	Same-Sex Women
State with Marriage Rights	2.890	-1.261	20.591	77.974***	167.200***	8.942
	(3.476)	(4.980)	(18.572)	(29.837)	(0.000)	(59.947)
Marriage Rights* Lower Earner	-1.107	7.208	12.817	-22.689	438.780***	175.248
	(6.699)	(7.118)	(36.725)	(46.023)	(0.000)	(140.960)
Percent Men in Job	-38.433***	-12.817*	-2.987	-6.733	0.000	-224.195***
	(4.424)	(6.812)	(22.792)	(32.175)	(.)	(86.983)
Absolute Weekly Earnings	0.009***	0.006*	-0.022*	-0.049**	0.209***	-0.034
	(0.002)	(0.003)	(0.012)	(0.020)	(0.000)	(0.036)
Lower Earner in Couple	16.087***	2.872	0.816	1.413	-24.689***	-242.389***
	(3.775)	(3.447)	(18.015)	(12.836)	(0.000)	(76.979)
Absolute Age	-0.886***	-2.370***	-0.929	-2.416**	-17.869***	-8.468**
	(0.185)	(0.224)	(0.705)	(0.973)	(0.000)	(3.696)
Older Person in Couple	-0.662	7.495**	14.571	6.311	51.165***	22.094
	(2.557)	(3.481)	(12.354)	(14.025)	(0.000)	(51.682)
Person of Color - Interracial	-1.436	-3.681	31.377	-29.978	0.000	20.738
	(7.322)	(13.541)	(31.136)	(59.749)	(.)	(47.714)
Person of Color* Lower Earner	-9.623	11.705	-27.398	-15.369	0.000	0.000
	(14.051)	(17.481)	(44.756)	(67.972)	(.)	(.)
Hispanic - Interethnic	-0.432	-22.597**	-38.349**	-10.048	0.000	-91.053
	(7.075)	(10.700)	(18.475)	(40.430)	(.)	(61.501)
Hispanic Interracial* Lower Earner	7.870	18.009	66.529*	-10.229	0.000	0.000
	(16.903)	(15.573)	(40.360)	(52.109)	(.)	(.)
Lower Education	10.129***	4.980	23.805	45.466*	564.077***	-32.621
	(3.120)	(3.415)	(16.548)	(26.236)	(0.000)	(79.378)
Interview on Holiday	-6.400	-29.106***	169.544**	-11.886	0.000	0.000
	(7.470)	(9.828)	(68.335)	(39.748)	(.)	(.)
Interview on Weekend	7.702***	-27.775***	7.307	-14.504	72.230***	-8.123
	(2.084)	(2.579)	(13.598)	(14.705)	(0.000)	(37.042)
Constant	114.436***	212.287***	87.876***	196.703***	327.159***	708.541***
	(7.961)	(9.875)	(27.645)	(33.196)	(0.000)	(188.942)
Observations	12893	10293	381	433	9	32

Notes: Author's calculation on ATUS 2003-2011 data. Standard errors in parentheses. *, **, *** denotes p<.01, .05, .10 respectively.

Table 2.6: Predicting Minutes Spent in Supervisory Care Work

	Different-Sex Married Men	Different-Sex Married Women	Different-Sex Unmarried Men	Different-Sex Unmarried Women	Same-Sex Men	Same-Sex Women
State with Marriage Rights	-14.944**	8.336	110.041***	3.677	405.839***	-139.265**
	(6.513)	(9.215)	(36.218)	(49.870)	(0.000)	(60.345)
Marriage Rights* Lower Earner	-1.295	-18.279	-62.514	-17.887	911.102***	412.742***
	(13.263)	(12.786)	(106.588)	(61.297)	(0.000)	(100.068)
Percent Men in Job	-18.765**	-49.235***	39.574	-21.972	0.000	363.086***
	(9.248)	(12.831)	(44.106)	(91.829)	(.)	(132.636)
Absolute Weekly Earnings	-0.001	-0.060***	-0.039	-0.111***	-0.051***	-0.146***
	(0.004)	(0.005)	(0.030)	(0.038)	(0.000)	(0.042)
Lower Earner in Couple	-0.547	8.919	-24.518	-7.497	-79.914***	-167.042**
	(6.702)	(6.265)	(31.628)	(41.604)	(0.000)	(72.940)
Absolute Age	0.059	0.174	-0.974	0.729	-35.274***	7.085
	(0.341)	(0.435)	(1.614)	(1.802)	(0.000)	(5.144)
Older Person in Couple	3.826	-12.620**	42.847*	-37.039	441.008***	151.954**
	(4.878)	(6.311)	(23.753)	(30.870)	(0.000)	(76.046)
Person of Color - Interracial	-4.583	-34.129	17.440	-178.167**	0.000	380.841***
	(14.771)	(25.198)	(40.866)	(69.983)	(.)	(67.049)
Person of Color* Lower Earner	25.306	4.707	46.300	215.120**	0.000	0.000
	(32.566)	(31.602)	(79.676)	(96.500)	(.)	(.)
Hispanic - Interethnic	15.168	39.988	12.726	6.369	0.000	233.537***
	(15.781)	(26.797)	(40.625)	(80.100)	(.)	(72.752)
Hispanic Interracial* Lower Earner	-49.149*	-4.726	-88.073	-103.857	0.000	0.000
	(27.383)	(34.705)	(70.668)	(102.239)	(.)	(.)
Lower Education	0.726	4.125	26.783	-24.747	945.384***	-219.736***
	(5.373)	(6.522)	(23.937)	(31.403)	(0.000)	(56.033)
Interview on Holiday	275.030***	217.770***	150.755***	248.453**	0.000	0.000
	(22.791)	(21.098)	(57.562)	(118.484)	(.)	(.)
Interview on Weekend	265.626***	233.596***	162.667***	191.711***	894.622***	285.182***
	(4.784)	(5.032)	(25.166)	(30.147)	(0.000)	(51.383)
Constant	199.886***	340.905***	188.504***	338.013***	741.655***	-28.015
	(15.245)	(17.342)	(56.620)	(100.828)	(0.000)	(209.789)
Observations	12893	10293	381	433	9	32

Notes: Author's calculation on ATUS 2003-2011 data. Standard errors in parentheses. *, **, *** denotes p<.01, .05, .10 respectively.

CHAPTER 3

POVERTY IN LESBIAN AND GAY COUPLE HOUSEHOLDS

Introduction

For good reason, poverty receives a great deal of attention in the economics literature. Poverty rates across groups are often compared as an indication of the relative well-being of various groups. Despite the tremendous surge in research on the economic lives of lesbians and gay men since Badgett's (1995) groundbreaking study on the wages of lesbian, gay, and bisexual (LGB) people, very little research on poverty in LGB versus straight couples exists, despite good reason to believe that LGB and straight households are at different risks of poverty.

Same-sex couple households may have different poverty rates or chances of being in poverty than different-sex couple households for two main reasons. First, same-sex couple households have different characteristics than different-sex couple households, and some of these characteristics are related to the probability of being in poverty. Higher levels of labor force participation, for example, serve as a barrier to poverty. Since both male and female same-sex couples have higher levels of labor force participation than different-sex couples (at both the extensive and intensive margins), LGB households may be safer from poverty than straight households. Greater racial and ethnic diversity in LGB couples (meaning that same-sex couples are more likely to be interracial), on the other hand, may make them more likely to be poor, since minority racial and ethnic groups have higher poverty rates. The differences in a couple's characteristics, which differ by

the sexual orientation of the people in a couple, are therefore related to the couple's chances of being in poverty.

Secondly, LGB people and couples may be treated differently than straight people and couples. Discrimination against LGB people may put the LGB group at a higher risk of poverty. For example, employer discrimination against LGB people can result in lower wages for LGB people, even if they have the same qualifications as straight people.

This study investigates whether and why the poverty rates and probability of being in poverty are different by household type. It therefore provides previously unknown information about the economic situation of households headed by same-sex couples, and may therefore be helpful in informing public policy aimed at protecting groups in a more vulnerable economic position.

The Determinants of Poverty

The literature on poverty differentials across populations identifies several determinants or predictors of poverty: employment, education, race/ethnicity, household structure, age, disability, region and community, and the gender of the householder. These individual- and household-level characteristics differ by sexual orientation, and therefore provide first hints about how and why the chances of being in poverty might differ for same-sex versus different-sex couple households.

The first critical determinant of poverty, employment status, is perhaps the most obvious predictor of a person or family's chances of being in poverty, in that employment brings income, which is a direct opposing force to poverty. Although there are many "working poor" in America – people who have jobs but do not earn enough at those jobs

to escape poverty – employment generally serves as a bridge out of poverty (see e.g. Schiller 2004, chapter 5). In more same-sex couples than different-sex married couples, both members of the couple work in the paid labor force (Black *et al.* 2007; Antecol & Steinberger 2013; Giddings *et al.* 2013), which protects same-sex couples from poverty. Table 1 shows descriptive statistics for households headed by different couple types in the 2010 American Community Survey data (described in detail below). Table 1 shows that 63.2 percent of same-sex male and 67.6 percent of female same-sex couples were composed of two employed people, compared to just 55.8 percent of unmarried and 48.8 percent of married different-sex couples. These differences in employment status serve as a protection from poverty for LGB people and families.

A second important determinant of poverty is one's educational attainment. Higher levels of education open opportunities for employment and better paying jobs, and thus serve as protection against poverty. On average, people in same-sex couples have higher levels of educational attainment than those in different-sex couples (e.g. Black *et al.* 2007a). As table 1 shows, same-sex couples (both male and female) are more likely to have one or both partners with more than a high school degree: 43.9 (39.4) percent of female (male) same-sex couples are composed of two people whose formal education goes beyond a high school diploma, compared to just 30.1 (16.9) percent of married (unmarried) different-sex couples. The relatively high educational attainment of people in same-sex couples should protect them from poverty.

Race and ethnicity are third predictors of poverty. African Americans and Hispanics are much more likely to be in poverty than whites and non-Hispanics, for example, in large part because of discrimination in education, the labor market, and the

housing market (Albelda *et al.* 1994; Schiller 2004; Quillian 2012). Same-sex couples are less likely than different-sex married couples to be composed of two white people (although the difference is not statistically significant for same-sex male couples versus different-sex married couples), and are more likely to have at least one Hispanic member of the couple. However, both male and female same-sex couples are more likely to be composed of two white and two non-Hispanic people than different-sex unmarried couples. The racial and ethnic composition of same-sex couples would serve as a protection from poverty vis-à-vis different-sex married couples, but would be associated with poverty rates higher than different-sex married couples.

Family size and structure is a fourth predictor of poverty. Children increase the need for financial resources but also limit the ability for parents to work. Single-parent households are at the highest risk of poverty (Schiller 2004). Households with more working-age adults can serve as a barrier to poverty, as those adults can work and contribute to family resources. However, it is also not clear that household adults share resources equally; some may have more access to household resources than others, and some may have to contribute more than others (Folbre 1986; Woolley & Marshall 1994). Same-sex couples are less likely to have any children in the household than different-sex couples, and they have a lower number of children when they have any children at all. This difference can serve as a protection from poverty for same-sex couples. Same-sex couples are less likely to have additional adults in their household compared to married different-sex couples, but given the definition of poverty employed in this study (discussed in the next section), the number of adults should not serve as a direct predictor

or poverty for the households in this study (although it may be an indicator of adults' financial need to share resources with other adults).

A fifth determinant of poverty is age. Older people are at the highest risk of being in poverty; along with age comes decreased income as people enter retirement or face age-based discrimination (Rothenberg & Gardner 2011). Young adults, who may have taken jobs before completing their education or are in entry-level positions, are more likely to be in poverty than those 25 or older (Schiller 2004). Same-sex couples, and especially lesbian couples, are much more likely to have a householder under 25, but are less likely to have a householder 65 or older. Compared to different-sex unmarried couples, on the other hand, people in same-sex couples are less likely to be very young and more likely to be of retirement age. Thus the age distribution of same-sex couples compared to different-sex couples is sometimes relatively beneficial (less likely than unmarried different-sex couples to be very young and less likely than married different-sex couples to be over 64), sometimes relatively dangerous (more likely than married different-sex couples to be very young and more likely than unmarried different-sex couples to be over 64).

Other determinants of poverty will also be relevant when comparing the poverty rates of same-sex versus different-sex couple households. Regional and community characteristics such as access to public transport to commute to work and well-developed infrastructure can serve as a barrier to poverty (Haughton & Khandker 2009); therefore residing in a more urban area may be a barrier to poverty. Same-sex couples are more likely to live in urban areas than both married and unmarried different-sex couples. City or state level anti-discrimination policies can also serve as a barrier to poverty

specifically for LGB people. Fluency in the English language also protects from poverty, as it increases the educational and work opportunities available to a person. Same-sex couples are more likely to have both members of the couple fluent in English than different-sex couples. Disability, which can serve as a barrier to employment, can put a person or family at risk of poverty. Same-sex couples are less likely to have a disabled member than different-sex married couples, but more likely than different-sex unmarried couples.

Finally, the gender of the householder is often cited as a strong determinant of poverty; households headed by women – especially single-parent households – are more likely to be poor than those headed by men (Schiller 2004; Haughton & Khandker 2009). In our case, the gender of the householder and the spouse/partner is obviously relevant. On average, women earn less than men, but women in same-sex couples earn more than their same-gender counterparts in different-sex married couples. Although lesbians earn more than straight women, they still earn less than both gay and straight men. Similarly, while gay men earn less than straight men, they still earn more than lesbians or straight women (see e.g. Table 1 in Antecol *et al.* 2008). Therefore, we might expect lesbian couples to have the lowest combined income and therefore highest poverty rates, followed by straight married couples, and finally gay male couples to have the lowest poverty rates.

Two studies have looked at the poverty rates of LGB versus straight families specifically. Albelda *et al.* (2009) used 2000 Census data along with data from the National Survey of Family growth and the California Health Interview Survey to conduct the first study of LBG poverty, and found that both gay and lesbian couples were more

likely to be in poverty than different-sex married couples. The present study builds on that work by using a more recent data sample and by doing decomposition of the poverty rate difference for same-sex versus different-sex couple households. This decomposition allows us to see how the characteristics of the different couple types, and the potentially different returns to those characteristics, affect the chances of the different households being in poverty. Prokos & Keene (2010) also use 2000 Census data to calculate poverty rates for different household types, and find that both male and female same-sex couples have higher poverty rates than different-sex married couples, but lower rates than unmarried different-sex couples. However, Prokos & Keene (2010) only include households with children in their analysis – an unfortunate subsample if one wants to make conclusions about the broader same-sex couple population. The present study is therefore the first to offer an analysis of the poverty rates of the entire coupled LGB population and give insight into which specific characteristics of that population increase or decrease their likelihood of being in poverty.

Measuring Poverty

Poverty is a complex concept and as such, its measurement is not straightforward. Two measurement concepts dominate the literature.¹⁷ First, poverty may be seen as a *relational* concept; in this framework, the poor can be counted as anyone in the lowest fifth (or tenth, or third) of the income distribution. The relational measure of poverty

¹⁷ A conceptualization of poverty which looks beyond income or expenditure as a measure of well-being is so-called “multi-dimensional poverty,” which relates traditional income or expenditure poverty to substandard social (economic, political, and civic or cultural) inclusion, economic well-being, and capability (e.g. educational attainment, health, and self-respect). There are quantitative measures of multi-dimensional poverty in the literature (e.g. Wagle 2008; Kakwani and Silber 2008). None discuss sexual orientation explicitly.

therefore considers one's economic standing in relation to that of others. When some people or households have access to a certain level of resources beyond that available to others, the "have-nots" can be considered impoverished. From this relational perspective, poverty will exist as long as there is income and/or wealth inequality.

A second way of measuring poverty is in absolute terms. This approach employs the idea that there is some minimum level of goods and services that people need or should have. People or households who do not have the resources to access those goods and services are then considered poor. This is the official approach taken by the US government. The official poverty rate in the US is calculated as the percent of people with an income below a certain level.

The official US poverty thresholds – the minimum income that a family of a certain size would need to not be considered in poverty – were developed in 1963 by Mollie Orshansky of the Social Security Administration. Orshansky used data from the 1955 Household Food Consumption Survey to estimate the minimum expenditure necessary for a nutritionally adequate diet for families of different compositions and sizes (number and age of household members), but not geographical locations. The poverty thresholds have not been updated since their original creation, but are adjusted each year to keep up with inflation based on the Consumer Price Index. Critics of this measure of poverty argue that this method of measuring, developed in the 1960s to measure the minimum income necessary to purchase the food necessary for subsistence, is no longer relevant to today's lifestyle and needs (Shaw 1995; Schiller 2004).

In response to these critiques, the Census Bureau has created an alternative Supplemental Poverty Measure (SPM) to better take into account the resources available

to families and the expenses that they have. Unlike the official poverty measures which only consider income as a financial resource, the SPM considers in-kind government program benefits and child support payments as part of a family's resources. The SPM also aims to better account for people's basic needs, such as food, clothing, shelter, work expenses, and medical costs by including these costs in the calculation of a reasonable poverty threshold. The resulting thresholds in the SPM are higher than the official poverty thresholds, and the poverty rates calculated using the SPM are higher for some groups, such as adults over 18 (and especially for adults over 65), but they are lower for individuals under 18. The SPM was 16.1 percent in 2011, and the official poverty rate was 15.1 percent (Short 2011). The data required to calculate the SPM come from the Current Population Survey, in which there are not enough same-sex couples to do the analysis in this paper, so unfortunately we cannot study differences in the SPM by couple type.

The present study uses data from the IPUMS sample of the 2010 American Community Survey (ACS) (Ruggles *et al.* 2010) to measure poverty in different household types. The ACS is an annual survey which sampled almost three million individuals living in the United States in 2010. The survey collects data on a vast range of demographic and economic information for individuals and households. Although there is no question on the ACS which asks directly about one's sexual orientation, researchers can locate people in same-sex couples based on the relationship category used to describe intra-household relations. Each household has a "householder," and this householder states their relationship to every other person in the household; when the householder has an "unmarried partner" of the same sex, these people are said to be lesbian or gay. In

order to reduce the probability of having the sample of same-sex couples contaminated by miscoded different-sex couples, this study follows the suggestions of Black *et al.* (2007b) and Gates & Steinberger (2009) and drops any observation for which the householder or the householder's spouse or partner has an imputed value for his/her marital status and who mailed in their completed survey (see Gates & Steinberger 2009 for details on locating same-sex couples in the Census and ACS data). This restriction reduces the amount of same-sex couples in the 2010 sample by about 20 percent, but it substantially reduces the chance of miscoding different-sex couples as lesbian or gay.

I use the official poverty threshold for 2010 set out by the US Census Bureau. A person or household is considered to be in poverty if their household income falls below the Federal Poverty Line (FPL). The FPL is based family size and the number of children in the household, as well as the age of the householder (65 and older, or not). The Census Bureau considers a "family" to be people who live in the same housing unit and who are related by blood, marriage, or adoption. Since this definition excludes same-sex couples, who are not recognized as married at the federal level given the Defense of Marriage Act, I amend the Census Bureau's definition of family to be any cohabiting couple (married or unmarried partners) along with all children under 18 living in the same household. Such an amendment to the definition of a family in measuring poverty to include unmarried but cohabiting partners as family members entered the literature in the 1990s (Ruggles 1990; Citro & Michael 1995; Carlson & Danzinger 1999). Indeed the National Research Council (Citro & Michael 1995) recommended that the definition of "family" be extended to include cohabiting partners. Some estimates show that extending the definition of family to include unmarried partners reduces the poverty rates of up to 11

percent for couples or their children, because the income of the unmarried partner brings the new “family” income above the poverty line for these households (Carlson & Danzinger 1999). In order to estimate comparable poverty rates across couple types, we must include the income of the householder and the householder’s spouse *or unmarried partner*: without the partner’s income, unmarried people would be more likely to be in poverty than married people, whose spouses’ income always get counted in poverty rate estimates.

Accordingly, I consider household income, which is used to compare against the FPL, to be the summation of the total income of the two members of the householder couple (householder and his/her spouse or unmarried partner). Total income is – as originally defined by the Census Bureau in poverty measurement – the sum of income from all sources, such as earnings, pensions, and interest. I exclude households where the value of any component of total income for either one of the members of the couple was given a data quality flag by the Census Bureau from the sample. Data quality flags are assigned to variables that had a missing value as a response; excluding households with the data quality flags reduces the poverty rates comparably for each household type. The first rows in table 1 give the overall household poverty rates by household type.

In 2010, 6.1% of all couple-led households were in poverty. This rate varies drastically based on the sexual orientation and marital status of the couple leading the household. Households headed by unmarried different-sex couples had the highest poverty rate of all couple types; 14.1% of these households were in poverty compared to 5.3% of married different-sex couple households. Same-sex male couple households had a lower poverty rate than different-sex married couple households (3.2%), but lesbian-led

households had a higher rate (7.5%). The differences in these rates are statistically significant across all couple types.

What can explain the differences in the poverty rates for the various household types? Research on poverty has identified several key determinants of poverty; namely the race, ethnicity, education level, employment status, age, disability status, and English fluency of both people in the couple are important determinants of income (and therefore poverty), along with the geographical location of a household (region or state and metropolitan area size) and the number of children and adults living in the household.

I create household-level variables based on the main characteristics which explain poverty to investigate the relationship between these characteristics and poverty for the different couple types. It is important that these variables capture household-level, not just person-level information, because the characteristics of *both* partners in the couple matter in determining poverty, not just the characteristics of one of the couple's members. For example, instead of an looking at just one person's race, I calculate the *couple's* racial composition: both white, both African American, both Asian, both Native American, both "other" race, interracial couple with a white person, or interracial couple with neither person white.

A person is considered disabled if they reported having cognitive, ambulatory, independent living, self-care, vision, or hearing difficulty. People cannot speak English fluently if they report that they cannot speak English or cannot speak it well. Because of the confidentiality requirements of the Census Bureau, almost 30% of cases in the 2010 data have an "unknown central city status." I therefore use measure of a household's degree of urbanity/ruralness given by the so-called Beale scale (named after Calvin

Beale, the researcher at the US Department of Agriculture who developed the scheme), which ranges from 1-9 and increases with ruralness.¹⁸ The means of these household characteristics for the different household types are given in table 3.1.

The descriptive statistics in table 1 provide several important pieces of information in beginning to explain the varying poverty levels for same-sex versus different-sex and married and unmarried couple households. Same-sex couples are more likely to have several characteristics that serve as protection against poverty, such as high levels of education, being employed, and being fluent in English. However, same-sex couples are less likely to be composed of two white partners, and they are much younger than different-sex married couples. Different-sex couples – both married and unmarried – are more likely to have children than same-sex couples and when comparing households with at least one child, different-sex couples have more children than same-sex couples.

Poverty rates vary considerably by the various subgroups presented in table 1. Table 3.2 shows the poverty rates for the couples with different characteristics. We can see, for example, that both male and female same-sex couples are more likely to be interracial than different-sex married couples (from table 3.1), and the poverty rates for

¹⁸ The county typology codes are based on the status of the county as measured in the 2000 census. The designations are as follows: 1= County in metropolitan area with a population of at least 1 million; 2= County in metropolitan area with a population between 250,000 and 1 million; 3= County in metropolitan area with a population less than 250,000, 4= Non-metropolitan county with an urban population of 20,000+, adjacent to a metropolitan area; 5= Non-metropolitan county with urban pop of 20,000+, not adjacent to a metropolitan area; 6= Non-metropolitan county with urban pop of 2,500-19,999, adjacent to a metropolitan area; 7= Non-metropolitan county with urban pop of 2,500-19,999, not adjacent to a metropolitan area; 8= Non-metropolitan county completely rural or less than 2,500 urban pop, adjacent to metro area; 9= Non-metropolitan county completely rural or less than 2,500 urban pop, not adjacent to a metropolitan area. The codes I use are a weighted average (based on population) of the Beale Code for each PUMA. Thanks go to Gary Gates for providing this information and data.

both gay and lesbian interracial couples are higher than for married straight interracial couples. Gay couples are less likely to be composed of two African Americans than straight married couples, but lesbian couples are more likely. Both gay and lesbian African American couples are more likely to be in poverty than straight married African American couples (although the difference is only statistically significant for lesbians).

While these descriptive statistics are illuminating, they do not allow us to establish a clear relationship between sexual orientation, marital status and poverty. To do that, we need to compare people of different sexual orientations and marital statuses in households with the same characteristics. The next section describes how this is done.

Multivariate Analysis Methods

To focus more directly on the link between sexual orientation/marital status and poverty, we need to compare households which differ in their sexual orientation or marital status, but which are identical in all other (observable) characteristics which could be related to poverty. For example, instead of comparing any random household headed by a gay male couple to any random household headed by a different-sex married couple, a multivariate regression model allows us to compare a gay male household and a different-sex married household whose leading couples have the same compositions of race and ethnicity, educational attainment, age, employment status, fluency in English, and disability, and which are in the same state, have a similar degree of rural/urbanity, and has the same number of children and adults. “Controlling” for these other characteristics allows us to highlight the role of sexual orientation/marital status in particular in predicting poverty.

Because the outcome variable of interest – being in poverty or not – is a dichotomous variable, I employ a probit regression. A probit model is preferable to an Ordinary Least Squares model when the dependent variable is dichotomous, because (1) an OLS model would predict values outside of the $[0, 1]$ range, which we know cannot occur when there are only two outcome choices, and (2) an OLS model with a dichotomous outcome would violate the assumption that the error terms are normally distributed (producing heteroskedasticity), making the standard errors (and t-tests) invalid. The probit model gives us the probability that an outcome occurs ($Y = 1$), given certain values of our independent variables in X :

$$p = \frac{e^{\beta_0 + \beta_i X_i + \varepsilon}}{1 + e^{\beta_0 + \beta_i X_i + \varepsilon}} . \quad (3.1)$$

Because of the non-linear form of the underlying function in the probit regression, a one unit change in one of our X variables does not simply translate to a constant effect on the outcome variable Y . Therefore, to find the marginal effect of any independent variable on Y , in this case being in poverty, we take all other variables at their means. The resulting coefficients can be interpreted as the change in probability of an event happening (being in poverty) when an independent variable X takes on a certain value (e.g. being in a same-sex couple), holding all other variables in the model at their means.

Along with finding the marginal effects of sexual orientation on the probability of being in poverty, we are also interested in seeing if the other independent variables in equation 1 have a different impact on the probability of being in poverty for households headed by different-sex versus same-sex couples. In a model whose underlying function is linear, the standard approach for decomposing the difference in an outcome across two groups into the portion explained by differences in the characteristics and differences in

the returns to these characteristics is the Oaxaca-Blinder (1973) decomposition, modeled as

$$\overline{Y_{SS}} - \overline{Y_{DS}} = (\overline{X^{SS}} - \overline{X^{DS}})\beta^{DS} + \overline{X^{DS}}(\beta^{SS} - \beta^{DS}) + (\alpha^{SS} - \alpha^{DS}) \quad (3.2)$$

for sexual orientation groups SS (same-sex) and DS (different-sex).

Yun (2004) provides an extension to the Oaxaca-Blinder decomposition methodology for non-linear models, including the probit regression, showing that the decomposition for the binary probit model is essentially the same as for the OLS model. The decomposition for probit models is available as a standard option in the Stata package `oaxaca`. An example of the use of this decomposition to analyze the poverty incidence (in India) is given in Gang *et al.* (2008).

Results: Explaining the sexual orientation gap in poverty rates

Table 3.3 shows the results of the multivariate probit models giving the contribution of being in a gay or lesbian couple on the probability of being in poverty. The results in column 1 show that controlling for the race, ethnicity, employment, education, age, English fluency, and disability compositions of a household, along with the number of adults and children in the home and the house's region and degree of ruralness, both same-sex and different-sex unmarried couples are more likely than different-sex married couples to be in poverty. Lesbians are most likely to be in poverty, confirming the expectations laid out earlier in the paper; they are 3.1 percentage points more likely to be in poverty than different-sex married couples. Gay couples are 1.2 percentage points more likely to be in poverty than different-sex married couples, although less likely than different-sex unmarried couples, who are 2.3 percentage points

more likely than different-sex married couples to be in poverty. The fact that lesbian couples are more likely to be in poverty than all other couple types, once controlling for other observable differences, undermines a popular interpretation of the “lesbian wage premium” literature. If lesbian earn more than an straight women on average (Badgett 2001; Clain & Leppel 2001, Berg & Lien 2002; Black *et al.* 2003; Blandford 2003; Jepson 2007; Antecol *et al.* 2008; Baumle *et al.* 2009; Cushing-Daniels & Yeung 2009), then we might not see higher poverty rates for lesbian couples because their composite earnings might be high enough to match the combined incomes of a straight man and woman. However, the fact that within many lesbian couples only one of the members of the couple has a wage premium while her partner faces a wage penalty – as shown in the first paper in this dissertation – can explain the finding that the household-level earnings of same-sex females is clearly lower than it is for different-sex married couples.

The results in table 3.3 also allow us to compare the marginal probability of being in poverty for same-sex couples versus different-sex unmarried couples. Subtracting one effect from the other in the first column, we see that same-sex male couples are 1.1 percentage points less likely to be in poverty than different-sex unmarried couples. Lesbian couples, on the other hand, are 0.8 percentage points more likely to be in poverty than different-sex unmarried couples.

We now turn to the question of the driving forces behind the different poverty rates for couples with different sexual orientations. Are the differences across couple type due mainly to the couples’ characteristics, or is it the effects of those characteristics which play a larger role? Columns 2-5 of table 3.3 present the probit regression for the different subpopulations, and table 3.4 decomposes the difference in the likelihood of

being in poverty for gay couples versus to married and unmarried straight couples; table 3.5 does the same for lesbians. Here the states have been compressed into regions; the Midwest is omitted.

Table 3.4 shows that the difference in the poverty rate of gay male couples and different-sex married couples is explained predominantly by the different characteristics these couples have. Indeed these characteristics over-determine gay couples' lower poverty rates. The largest driver of gay couples' protection from poverty is having fewer children in the household; this characteristic explains 90 percent (.0185/.0206) of the poverty gap between gay couples and straight married couples. Gay couples' higher education levels are the other main factor keeping the poverty rates of gay couples low. Lower rates of having a Hispanic member of the couple is another factor related to gay couples' low poverty rates. On the other hand, gay male couples' young age and the lower chance of having other adults in the household are characteristics which put them at higher risk of being in poverty. The number of adults in the household is perhaps related to poverty in the sense that poorer couples are more likely to live with other adults, to pool resources. The gay couples with more adults in their household may therefore have higher rates than other gay couples, so a higher number of adults in the household is associated with higher chances of being in poverty.

The returns to the characteristics of same-sex male and different-sex married couples do not differ in a statistically significant way. This means that gay couples seem to have the same returns to their characteristics than different-sex married couples.

Comparing gay couples to different-sex unmarried couples, a very similar story emerges. Differences in education are the main driver of gay couples' lower poverty

rates. While gay couples tend to be younger than married straight couples, they are often older than unmarried straight couples, and this helps keep their poverty rates lower than unmarried straight couples. The coefficient on the characteristic of having more adults in the household is positive, which means that gay couples with more adults in the household are more likely to be in poverty. As discussed above, this is perhaps a selection effect: poor couples may be more likely to have other adults in their household in order to share resources with the additional adult(s).

The probit models for gay male couples show that while the poverty rates for gay couples is lower than for straight married couples, gay couples face greater vulnerability to poverty when we hold the characteristics of the couples constant. The Oaxaca-Blinder decompositions show that it is mainly differences in employment, education, and the number of children in the household which keep gay couples out of poverty, compared to straight couples. Further, there are not significantly different returns to the characteristics, which says that these characteristics seem to work similarly for male same-sex couples and different-sex couples in predicting poverty.

The Oaxaca-Blinder decomposition of the difference in poverty rates between lesbians and straight women is given in table 3.5. Overall, lesbian couples have characteristics which protect them from being in poverty, but face lower returns on these beneficial characteristics, which drive their poverty rate above straight married couples'. Lesbian couples benefit from their higher education levels, more hours spent in the labor force, and being less likely to have children. Most notable in the decomposition of lesbian versus straight married poverty rates is that lesbians have important characteristics which protect them from poverty, but receive lower returns to these beneficial characteristics

than straight married couples. Although each individual estimate for the returns of various characteristics presented in table 3.5 lack statistical significance, as a whole it is these returns which push lesbian poverty rates higher than married straight couples'. The characteristic with the most differentiated returns for lesbian couples and straight married couples is employment, especially at the intensive margin. The fact that lesbian couples are much more likely to have both partners working full time and less likely to have neither partner working zero hours (see table 3.1) serves as the biggest protection from poverty for lesbian couples compared to different-sex married couples.

Decomposing the poverty rate difference for lesbian couples and different-sex unmarried couples, we can clearly see that lesbian couples' characteristics over-predict their lower poverty rates; however, again, lesbians suffer from less positive returns to these beneficial characteristics compared to their straight counterparts. Lesbian couples' higher education, higher age, higher number of hours spent working, and lower probability of having children protect them from poverty vis-à-vis unmarried different-sex couples. Although the sample sizes for the various characteristics are too low, which drives up the standard errors of the estimates of the returns for each characteristic and makes them statistically insignificant, we can see that there is a significant overall difference in the returns to these characteristics for lesbian and straight unmarried couples. Lesbian couples have better returns on their employment status and household composition, but they face negative returns on their city dwelling, educational attainment, and especially their age.

Overall, the Oaxaca-Blinder results show that while gay and lesbian couples often have characteristics which protect them from poverty, they experience lower returns to

these endowments which might put them at a higher risk of being in poverty. Indeed controlling for those characteristics, as in the first column of table 3.3, shows that households headed by gay and lesbian couples are more likely to be in poverty than those households led by a straight married couple. The decomposition of the poverty gap helps to show that it is often the lower returns to their positive characteristics which increase the risk of poverty for same-sex couples.

Discussion and Conclusions

Despite a prevalent myth of gay affluence (Badgett 2001), same-sex couples are more likely than similar married different-sex counterparts to be in poverty. Oaxaca-Blinder decompositions of poverty rates for the different household types show that while same-sex couples have many characteristics which protect them from being in poverty, they experience lower returns to these endowments. Lesbian couples in particular suffer from low returns on characteristics such as their high educational attainment.

Gay and lesbian couples face social stigma and discrimination, which are barriers to economic security. Perhaps in part to counteract these negative forces, same-sex couples often have higher employment participation and educational attainment. The multivariate model predicting poverty presented in this paper showed that without those characteristics, gay male couple and especially lesbian couple households would be at significantly higher risk of poverty compared to married different-sex couple households. Although same-sex couples have lower poverty rates than unmarried different-sex couples, taking away these protective characteristics also makes lesbian couples more susceptible to impoverishment than different-sex unmarried couples.

There is, therefore, some negative effect of being gay or lesbian on a person's or couple's economic security. Public policy could be implemented to protect gay and lesbian people and their families; implementing federal anti-discrimination legislation and a nation-wide right to marry for same-sex couples would be important steps in counteracting the negative stigma towards gays and lesbians.

Table 3.1: Household Poverty Rates and Descriptive Statistics by Household Type

	Sexual Orientation/Marital Status of Head Couple				
	(1)	(2)	(3)	(4)	(5)
Variable	Different-Sex Married	Different-Sex Unmarried	Same-Sex Male	Same-Sex Female	All Householders and Partners
Percent in Poverty	5.3	14.1**	3.2*** ^{oo}	7.5*** ^{oo}	6.1
	(0.000)	(0.002)	(0.004)	(0.006)	(0.000)
Couple Characteristics					
<i>Race of Couple</i>					
Both White	80.7	72.0**	80.3 ^{oo}	77.7*** ^{oo}	79.9
	(0.001)	(0.002)	(0.007)	(0.008)	(0.000)
Both African American	5.4	8.3**	1.7*** ^{oo}	6.4*** ^{oo}	5.7
	(0.000)	(0.001)	(0.002)	(0.006)	(0.000)
Both Native American	0.2	0.6**	0.2 ^{oo}	0.1*** ^{oo}	0.2
	(0.002)	(0.006)	(0.002)	(0.001)	(0.000)
Both Asian	4.6	1.3**	0.9*** ^{oo}	0.8*** ^{oo}	4.3
	(0.000)	(0.000)	(0.002)	(0.002)	(0.000)
Both Other Race	3.1	5.8**	1.3*** ^{oo}	2.6*** ^{oo}	3.4
	(0.000)	(0.001)	(0.002)	(0.003)	(0.000)
Interracial - With White	5.3	10.6**	14.4*** ^{oo}	11.1**	5.8
	(0.000)	(0.001)	(0.006)	(0.006)	(0.000)
Interracial - Without White	0.6	1.5**	1.2*	1.4*	0.7
	(0.006)	(0.015)	(0.012)	(0.014)	(0.000)
<i>Ethnicity of Couple</i>					
Neither Hispanic	86.2	77.3**	82.4*** ^{oo}	84.7*** ^{oo}	85.3
	(0.000)	(0.002)	(0.007)	(0.007)	(0.000)
One Hispanic	4.6	8.5**	12.7*** ^{oo}	9.5*** ^{oo}	5.0
	(0.000)	(0.001)	(0.006)	(0.005)	(0.000)
Both Hispanic	9.3	14.3**	4.9*** ^{oo}	5.8*** ^{oo}	9.7
	(0.000)	(0.002)	(0.005)	(0.004)	(0.000)
<i>Employment of Couple - Extensive</i>					
Both Unemployed	0.5	1.9**	1.2*** ^{oo}	0.6 ^{oo}	0.7
	(0.005)	(0.019)	(0.012)	(0.006)	(0.000)
Both NILF	16.0	6.5**	7.6*** ^{oo}	5.5*** ^{oo}	15.1
	(0.000)	(0.001)	(0.005)	(0.004)	(0.000)
Both Employed	48.8	55.8**	63.2*** ^{oo}	67.6*** ^{oo}	49.6
	(0.001)	(0.002)	(0.009)	(0.008)	(0.001)
Unemployed/Employed	6.0	12.8**	9.1*** ^{oo}	8.2*** ^{oo}	6.7
	(0.000)	(0.001)	(0.005)	(0.005)	(0.000)
Employed/NILF	27.0	20.2**	17.3*** ^{oo}	16.9*** ^{oo}	26.3
	(0.001)	(0.002)	(0.007)	(0.007)	(0.001)
Unemployed/NILF	1.5	2.8**	1.7 ^{oo}	1.3 ^{oo}	1.7
	(0.000)	(0.001)	(0.002)	(0.002)	(0.000)

Table 3.1 continued...

<i>Employment of Couple - Intensive</i>	Different-Sex Married	Different-Sex Unmarried	Same-Sex Male	Same-Sex Female	All Householders and Partners
Both No Work	15.2 (0.000)	7.3** (0.001)	7.7** (0.005)	5.8*** ^{oo} (0.005)	14.4 (0.000)
Both Part Time	2.7 (0.000)	5.3** (0.001)	3.2 ^{oo} (0.004)	4.0*** ^{oo} (0.004)	2.9 (0.000)
Both Full Time	35.3 (0.001)	41.3** (0.002)	51.5*** ^{oo} (0.009)	53.1*** ^{oo} (0.009)	36.0 (0.001)
Part-Time/Full Time	18.1 (0.000)	21.1** (0.002)	17.3 ^{oo} (0.007)	20.0* (0.008)	18.4 (0.000)
No Work/Part Time	6.3 (0.002)	6.7** (0.001)	4.7*** ^{oo} (0.004)	4.5*** ^{oo} (0.004)	6.3 (0.000)
No Work/Full Time	22.5 (0.001)	18.3** (0.002)	15.7*** ^{oo} (0.007)	12.7*** ^{oo} (0.006)	22.1 (0.000)
<i>Householder Age</i>					
Under 24	1.5 (0.000)	14.4** (0.002)	2.9*** ^{oo} (0.004)	5.9*** ^{oo} (0.005)	2.7 (0.000)
25-34	14.7 (0.000)	36.5** (0.002)	17.6*** ^{oo} (0.007)	21.4*** ^{oo} (0.008)	16.7 (0.000)
35-49	33.3 (0.001)	29.5** (0.002)	43.6*** ^{oo} (0.009)	40.4*** ^{oo} (0.009)	33.0 (0.001)
50-64	32.3 (0.001)	15.5** (0.001)	28.1*** ^{oo} (0.008)	26.6*** ^{oo} (0.008)	30.7 (0.001)
65+	18.2 (0.000)	4.1** (0.001)	7.8*** ^{oo} (0.004)	5.7*** ^{oo} (0.004)	16.8 (0.000)
<i>Spouse/Partner Age</i>					
Partner Older	8.9 (0.000)	15.2** (0.002)	13.7** ^o (0.006)	16.7** ^o (0.007)	9.5 (0.000)
Partner Younger	15.1 (0.000)	20.9** (0.002)	28.0*** ^{oo} (0.008)	23.1*** ^{oo} (0.008)	15.7 (0.000)
Partner Same Age	76.0 (0.001)	63.8** (0.002)	58.3*** ^{oo} (0.009)	60.2*** ^{oo} (0.009)	74.8 (0.001)
<i>Education of Couple</i>					
Both Less Than High School	5.2 (0.000)	7.3** (0.001)	2.0*** ^{oo} (0.003)	1.4*** ^{oo} (0.002)	5.3 (0.000)
Both High School Degree	30.0 (0.001)	37.1** (0.002)	19.3*** ^{oo} (0.008)	23.0*** ^{oo} (0.008)	30.6 (0.001)
Both More Than High School	30.1 (0.001)	16.9** (0.002)	39.4*** ^{oo} (0.009)	43.9*** ^{oo} (0.009)	29.0 (0.001)
LTHS/HS	8.2 (0.000)	14.4** (0.002)	3.9*** ^{oo} (0.004)	4.8*** ^{oo} (0.005)	8.8 (0.000)
MTHS/HS	24.9 (0.001)	22.3** (0.002)	33.8*** ^{oo} (0.009)	25.9 ^{oo} (0.008)	24.7 (0.000)
MTHS/LTHS	1.6 (0.000)	2.0** (0.001)	1.7 (0.002)	1.1* ^{oo} (0.002)	1.6 (0.000)

Table 3.1 continued...

	Different-Sex Married	Different-Sex Unmarried	Same-Sex Male	Same-Sex Female	All Householders and Partners
<i>English Fluency of Couple</i>					
Both Speak English	93.7 (0.000)	92.3** (0.001)	97.4*** (0.004)	97.9*** (0.003)	93.6 (0.000)
One Speaks English	3.2 (0.000)	3.8** (0.001)	1.7*** (0.003)	1.5*** (0.002)	3.3 (0.000)
Neither Speak English	3.0 (0.000)	3.9** (0.001)	0.9*** (0.002)	0.6*** (0.002)	3.1 (0.000)
<i>Disability of Couple</i>					
Neither Disabled	82.1 (0.000)	85.1** (0.001)	84.2** (0.007)	84.4** (0.007)	82.4 (0.000)
One Disabled	14.0 (0.000)	11.9** (0.001)	13.3° (0.006)	12.8* (0.006)	13.8 (0.000)
Both Disabled	3.9 (0.000)	3.0** (0.001)	2.5*** (0.003)	2.8** (0.003)	3.8 (0.000)
<i>Region</i>					
New England	4.8 (0.000)	5.6** (0.001)	5.4 (0.004)	7.2*** (0.005)	4.9 (0.000)
Mid-Atlantic	12.6 (0.000)	12.5 (0.001)	13.8° (0.006)	12.2 (0.006)	12.6 (0.000)
East North Central	15.9 (0.000)	16.4** (0.002)	11.5*** (0.006)	13.8*** (0.007)	15.9 (0.000)
West North Central	7.6 (0.000)	7.4* (0.001)	7.1° (0.006)	6.3** (0.005)	7.6 (0.000)
South Atlantic	18.8 (0.000)	17.6** (0.002)	19.4° (0.007)	17.7 (0.007)	18.7 (0.000)
East South Central	6.1 (0.000)	5.2** (0.001)	3.9*** (0.004)	4.2*** (0.004)	6.0 (0.000)
West South Central	11.3 (0.000)	10.1** (0.001)	10.0* (0.005)	11.3° (0.006)	11.1 (0.000)
Mountain	7.4 (0.000)	7.7** (0.001)	7.0 (0.005)	9.6*** (0.005)	7.4 (0.000)
Pacific	15.6 (0.000)	17.5** (0.008)	21.8*** (0.008)	17.7* (0.007)	15.8 (0.000)
<i>Metropolitan Size</i>					
Large	49.5 (0.001)	50.6** (0.002)	67.9*** (0.009)	57.5*** (0.009)	49.7 (0.001)
Medium	19.8 (0.000)	19.9 (0.002)	18.1° (0.007)	21.7° (0.008)	19.8 (0.000)
Small	8.4 (0.000)	8.8* (0.001)	5.8*** (0.004)	7.0*** (0.005)	8.4 (0.000)
Non-Metro	22.3 (0.000)	20.7** (0.002)	8.3*** (0.005)	13.8*** (0.006)	22.1 (0.000)

Table 3.1 continued...

<i>Household Composition</i>	Different-Sex Married	Different-Sex Unmarried	Same-Sex Male	Same-Sex Female	All Householders and Partners
Number of Adults	2.3	2.2**	2.2** ^{oo}	2.2** ^{oo}	2.3
	(0.001)	(0.002)	(0.010)	(0.011)	(0.001)
Any Children Present	45.0	42.8**	7.7** ^{oo}	27.9** ^{oo}	44.6
	(0.001)	(0.002)	(0.006)	(0.009)	(0.001)
Number of Children, when any	1.93	1.87**	1.67** ^o	1.75** ^o	1.92
	(0.002)	(0.007)	(0.078)	(0.047)	(0.002)
Observations	962,826	83,056	3,950	3,962	1,053,794
<i>Notes: Author's calculations on ACS 2010. In columns 2, 3 and 4 a statistically significant difference in means, relative to column 1, is indicated by * ($p < .10$) or ** ($p < .01$). Additionally in columns 3 and 4 a statistically significant difference in means, relative to column 2, is indicated by ^o ($p < .10$) or ^{oo} ($p < .01$).</i>					

Table 3.2: Poverty Rates by Household Type and Couple Characteristics

Variable	Sexual Orientation/Marital Status of Head Couple				
	(1)	(2)	(3)	(4)	(5)
	Different-Sex Married	Different-Sex Unmarried	Same-Sex Male	Same-Sex Female	All Householders and Partners
Overall	5.3 (0.000)	14.1** (0.002)	3.2*** ^{oo} (0.004)	7.5*** ^{oo} (0.006)	6.1 (0.000)
Couple Characteristics					
<i>Race of Couple</i>					
Both White	4.5 (0.000)	12.1** (0.002)	2.7*** ^{oo} (0.004)	5.1 ^{oo} (0.005)	5.1 (0.000)
Both African American	7.8 (0.002)	21.3** (0.007)	11.3 ^o (0.042)	22.0** (0.043)	9.7 (0.002)
Both Native American	18.9 (0.011)	33.2** (0.025)	n/a	n/a	21.9 (0.010)
Both Asian	7.2 (0.002)	9.6* (0.010)	15.0 (0.072)	n/a	7.2 (0.002)
Both Other Race	19.0 (0.003)	30.2** (0.009)	14.3 ^{oo} (0.056)	31.6* (0.064)	20.8 (0.003)
Interracial - With White	5.1 (0.001)	12.6** (0.004)	3.6 ^{oo} (0.010)	9.8* (0.021)	6.4 (0.001)
Interracial - Without White	6.4 (0.004)	15.2** (0.013)	n/a	18.2* (0.061)	8.2 (0.004)
<i>Ethnicity of Couple</i>					
Neither Hispanic	3.9 (0.000)	11.7** (0.002)	2.8*** ^{oo} (0.003)	6.8*** ^{oo} (0.006)	4.6 (0.000)
One Hispanic	4.9 (0.001)	11.6** (0.005)	2.1*** ^{oo} (0.008)	5.1 ^{oo} (0.013)	5.9 (0.001)
Both Hispanic	18.6 (0.002)	28.7** (0.005)	14.0 ^{oo} (0.036)	21.5 ^o (0.037)	20.0 (0.002)
<i>Employment of Couple - Extensive</i>					
Both Unemployed	35.8 (0.009)	53.4** (0.015)	31.9 ^o (0.086)	64.0* (0.117)	40.5 (0.008)
Both NILF	9.0 (0.001)	34.8** (0.008)	9.8 ^{oo} (0.020)	28.2** (0.039)	10.1 (0.001)
Both Employed	1.3 (0.000)	3.5** (0.001)	1.3 ^{oo} (0.003)	2.4* ^o (0.005)	1.5 (0.000)
Unemployed/Employed	8.9 (0.002)	18.7** (0.005)	1.4*** ^{oo} (0.007)	14.7* (0.030)	10.6 (0.002)
Employed/NILF	7.6 (0.001)	24.3** (0.004)	2.8*** ^{oo} (0.008)	11.5*** ^{oo} (0.015)	8.8 (0.001)
Unemployed/NILF	29.6 (0.005)	56.9** (0.012)	40.2 ^o (0.071)	44.1 (0.090)	40.0 (0.005)

Table 3.2 continued...

<i>Employment of Couple - Intensive</i>	Different-Sex Married	Different-Sex Unmarried	Same-Sex Male	Same-Sex Female	All Householders and Partners
Both No Work	10.9 (0.001)	41.6** (0.007)	17.5*°° (0.027)	40.2** (0.043)	12.5 (0.001)
Both Part Time	15.7 (0.003)	37.4** (0.009)	9.6*°° (0.025)	34.9** (0.051)	19.4 (0.003)
Both Full Time	0.4 (0.000)	0.8** (0.001)	0.7 (0.002)	0.8 (0.003)	0.5 (0.000)
Part-Time/Full Time	2.7 (0.000)	7.9** (0.003)	2.5°° (0.009)	4.8*°° (0.011)	3.2 (0.001)
No Work/Part Time	17.4 (0.002)	50.0** (0.008)	13.8°° (0.029)	40.4*°° (0.048)	20.6 (0.002)
No Work/Full Time	6.7 (0.001)	20.5** (0.004)	0.9*°°° (0.005)	4.6*°° (0.012)	7.8 (0.001)
<i>Householder Age</i>					
24 and below	17.9 (0.004)	23.6** (0.005)	16.5 (0.047)	22.3 (0.036)	20.7 (0.003)
25-34	9.4 (0.001)	14.7** (0.003)	2.1*°°° (0.007)	14.2** (0.018)	10.5 (0.001)
35-49	5.8 (0.001)	13.4** (0.003)	3.1*°°° (0.006)	4.6°° (0.007)	6.4 (0.001)
50-64	3.6 (0.000)	8.1** (0.003)	3.0°° (0.005)	3.4°° (0.008)	3.8 (0.000)
65+	3.2 (0.000)	2.8 (0.003)	2.1 (0.007)	6.5 (0.024)	3.1 (0.000)
<i>Spouse/Partner Age</i>					
Partner Older	7.2 (0.001)	16.8** (0.004)	2.7*°°° (0.007)	7.2°° (0.013)	8.6 (0.001)
Partner Younger	6.6 (0.001)	14.0** (0.003)	4.9*°° (0.008)	11.2** (0.017)	7.5 (0.001)
Partner Same Age	4.9 (0.000)	13.5** (0.002)	2.5*°°° (0.004)	6.2*°° (0.006)	5.5 (0.000)
<i>Education of Couple</i>					
Both Less Than High School	25.8 (0.003)	43.8** (0.008)	20.4°° (0.057)	44.1* (0.080)	28.1 (0.003)
Both High School Degree	5.7 (0.001)	13.6** (0.002)	6.2°° (0.012)	12.3** (0.016)	6.6 (0.001)
Both More Than High School	1.3 (0.000)	2.9** (0.002)	0.7*°°° (0.002)	1.6°° (0.004)	1.4 (0.000)
LTHS/HS	13.9 (0.002)	27.6** (0.005)	18.5° (0.045)	44.8*°°° (0.051)	16.1 (0.002)
MTHS/HS	2.4 (0.000)	4.6** (0.002)	1.8*°° (0.003)	3.2° (0.007)	2.6 (0.000)
MTHS/LTHS	8.4 (0.002)	16.8** (0.011)	1.7*°°° (0.012)	37.0*°° (0.099)	9.5 (0.003)

Table 3.2 continued...

	Different-Sex Married	Different-Sex Unmarried	Same-Sex Male	Same-Sex Female	All Householders and Partners
<i>English Fluency of Couple</i>					
Both Speak English	4.0 (0.000)	12.2** (0.001)	2.9*** ^{oo} (0.003)	6.9*** ^{oo} (0.006)	4.7 (0.000)
One Speaks English	19.6 (0.003)	30.9** (0.011)	4.4*** ^{oo} (0.023)	25.6 (0.081)	20.8 (0.003)
Neither Speak English	32.2 (0.004)	43.6** (0.011)	39.0 (0.105)	65.7*** ^o (0.132)	33.6 (0.003)
<i>Disability of Couple</i>					
Neither Disabled	4.7 (0.000)	12.7** (0.002)	2.3*** ^{oo} (0.003)	6.8*** ^{oo} (0.006)	5.4 (0.000)
One Disabled	7.4 (0.001)	20.3** (0.005)	8.2 ^{oo} (0.017)	8.0 ^{oo} (0.015)	8.4 (0.001)
Both Disabled	11.8 (0.002)	28.8** (0.011)	8.6 ^{oo} (0.027)	25.6* (0.065)	13.1 (0.002)
<i>Region</i>					
New England	2.8 (0.001)	7.0** (0.005)	1.7 ^{oo} (0.009)	9.5** (0.025)	3.3 (0.001)
Mid-Atlantic	4.2 (0.001)	10.3** (0.004)	2.0*** ^{oo} (0.006)	2.8 ^{oo} (0.015)	4.8 (0.001)
East North Central	4.3 (0.001)	15.3** (0.004)	2.2*** ^{oo} (0.007)	8.5*** ^{oo} (0.019)	5.4 (0.001)
West North Central	3.7 (0.001)	11.6** (0.006)	6.7 ^o (0.023)	12.2** (0.029)	4.5 (0.001)
South Atlantic	5.2 (0.001)	14.6** (0.004)	3.7*** ^{oo} (0.009)	5.7 ^{oo} (0.010)	6.1 (0.001)
East South Central	6.6 (0.001)	20.0** (0.008)	5.6 ^{oo} (0.023)	19.9 ^{oo} (0.033)	7.7 (0.001)
West South Central	7.3 (0.001)	17.0** (0.005)	3.2*** ^{oo} (0.012)	13.2* (0.023)	8.2 (0.001)
Mountain	6.2 (0.001)	14.5** (0.005)	1.8*** ^{oo} (0.007)	7.0 ^{oo} (0.017)	7.0 (0.001)
Pacific	6.5 (0.001)	14.9** (0.004)	3.4*** ^{oo} (0.008)	5.0 ^{oo} (0.009)	7.3 (0.001)
<i>Metropolitan Size</i>					
Large	4.9 (0.000)	12.1** (0.002)	2.4*** ^{oo} (0.003)	4.3 ^{oo} (0.006)	5.6 (0.000)
Medium	5.3 (0.001)	14.2** (0.003)	4.9 ^{oo} (0.011)	11.4** (0.017)	6.1 (0.001)
Small	5.2 (0.001)	16.5** (0.006)	5.4 ^{oo} (0.018)	10.7*** ^{oo} (0.021)	6.3 (0.001)
Non-Metro	6.3 (0.001)	17.8** (0.004)	4.9 ^{oo} (0.016)	13.2*** ^o (0.020)	7.3 (0.001)

Table 3.2 continued...

<i>Household Composition</i>	Different-Sex Married	Different-Sex Unmarried	Same-Sex Male	Same-Sex Female	All Householders and Partners
Any Children Present	8.7 (0.001)	24.6** (0.003)	15.7* ^{oo} (0.030)	15.7** ^{oo} (0.016)	10.1 (0.001)
No Children Present	2.6 (0.000)	6.3** (0.001)	2.2 ^{oo} (0.003)	4.3** ^{oo} (0.005)	2.9 (0.000)
Observations	962,826	83,056	3,950	3,962	1,053,794

*Notes: Author's calculations on ACS 2010. In columns 2, 3 and 4 a statistically significant difference in means, relative to column 1, is indicated by * ($p < .10$) or ** ($p < .01$). Additionally in columns 3 and 4 a statistically significant difference in means, relative to column 2, is indicated by ^o ($p < .10$) or ^{oo} ($p < .01$).*

Table 3.3: Probit regression predicting being in poverty; marginal effects at mean

Sexual Orientation/Marital Status (omitted: different-sex married)	All	Different-Sex Married	Different-Sex Unmarried	Same-Sex Male	Same-Sex Female
Same-Sex Male	.0122433*				
	0.0049459				
Same-Sex Female	.0313651***				
	0.0040542				
Different-Sex Unmarried	.023498***				
	0.0007275				
Race of Couple (omitted: both white)					
Both Black	.0305725***	.0290477***	.0338002***	0.0129564	0.0074536
	0.0011086	0.0011988	0.0033113	0.0282451	0.0186153
Both Other Race	.0223844***	.0236375***	0.0064285	0.0379183	-0.007369
	0.0009813	0.0010066	0.0036117	0.0249121	0.0243085
Interracial, no white	.0083613***	.006504*	.0144429*	-0.0111479	0.018601
	0.0024248	0.0027537	0.0062107	0.0412137	0.0219563
Interracial, one white	.0095441***	.0082929***	.0071674*	0.0245883	.056779***
	0.0012107	0.0013345	0.0033194	0.013818	0.0171324
Ethnicity of Couple (omitted: neither Hispanic)					
Both Hispanic	.0258019***	.0256264***	.0321163***	.078069***	0.0401641
	0.0009512	0.0009873	0.0033423	0.0207772	0.0215283
One Hispanic	.0067154***	.0084177***	-0.0021289	-0.0193075	0.0146542
	0.0014022	0.001532	0.0039365	0.0170198	0.0234819
English Fluency (omitted: both speak English)					
One speaks English	.0245078***	.0262837***	.0115437*	-.1680008**	-0.0035491
	0.0013319	0.0013732	0.0047672	0.0514987	0.0320127
Neither speaks English	.0303871***	.0343781***	0.0001661	0.0279417	-.1080761***
	0.0011753	0.0012194	0.0040587	0.0265613	0.0295559
Employment of Couple - Extensive (omitted: both employed)					
Both Unemployed	.0986355***	.0996945***	.0987974***	.1495437***	0.0357518
	0.0021912	0.0024467	0.0056822	0.03164	0.0379429
Both NILF	.0772516***	.0749436***	.1114598***	.0610156*	0.0315306
	0.0013541	0.0014016	0.0050219	0.0303532	0.0305664
Unemployed; employed	.049232***	.0508999***	.0443781***	-0.0159631	0.0199981
	0.0012328	0.0013371	0.0035004	0.0297929	0.0193258
Employed; NILF	.0451633***	.0457011***	.050733***	0.0180506	0.0281552
	0.0011621	0.0012286	0.0036315	0.0243476	0.0263208
Unemployed; NILF	.0979164***	.0951948***	.1180112***	.1355533***	.0667053*
	0.0016002	0.0017039	0.0051047	0.0305472	0.0313616

Table 3.3 continued...

	All	Different-Sex Married	Different-Sex Unmarried	Same-Sex Male	Same-Sex Female
Employment of Couple - Intensive (omitted: both don't work)					
Both Part Time	.0279983*** 0.0014801	.0284854*** 0.001582	.0182127*** 0.004692	0.0278207 0.0288124	-0.0438422 0.0268334
Both Full Time	-.1100756*** 0.0016611	-.0993753*** 0.0017421	-.1862952*** 0.0056762	-0.0593025 0.0331659	-.2504548*** 0.0336675
Part Time; Full Time	-.0611564*** 0.0013472	-.0570417*** 0.0014067	-.0955206*** 0.0046292	-0.0401992 0.0279469	-.1746289*** 0.030826
Part time; No Work	.0202756*** 0.0010933	.0173992*** 0.0011273	.0357404*** 0.0043269	0.0075933 0.0205957	-0.0337138 0.0262642
Full Time; No Work	-.0555663*** 0.0013005	-.0547091*** 0.0013559	-.0664497*** 0.0045972	-.125519*** 0.0329579	-.1978424*** 0.0334723
Age (omitted: both 50-64)					
Householder <25	.0830848*** 0.0012641	.0809214*** 0.001627	.1111182*** 0.0029001	.1151079*** 0.0195038	.1514861*** 0.019462
Householder 25-34	.0341895*** 0.0008308	.033415*** 0.0008917	.0456303*** 0.0027119	-0.0109196 0.015826	.1147192*** 0.0151117
Householder 35-49	.0070635*** 0.0007206	.0056249*** 0.0007495	.0214348*** 0.0027612	0.0103416 0.0119693	.0315808* 0.0151094
Householder 65+	-.0456126*** 0.0008787	-.0422552*** 0.0008794	-.1052872*** 0.0054129	-.0544032** 0.0165613	-0.0189246 0.0256576
Partner younger	.0159482*** 0.0006407	.0154548*** 0.0006776	.0195764*** 0.0020712	.0210226* 0.0099292	.0464822*** 0.0111914
Partner older	-.0076444*** 0.0007892	-.0065617*** 0.00086	-.0147978*** 0.0022251	-0.0132423 0.0147481	-0.0160742 0.0128693
Education (omitted: both high school)					
Both more than high school	-.0378979*** 0.0009499	-.0368233*** 0.0009764	-.0278428*** 0.0039123	-.0492103* 0.0202083	-.0533728** 0.017448
More than high school; HS	-.0222609*** 0.0008416	-.0208613*** 0.0008738	-.0281206*** 0.0030943	-0.0280696 0.0173496	-.0404114* 0.0162773
LTHS; MTHS	.0105472*** 0.0018218	.0091593*** 0.0019345	.0162747** 0.0059185	-.0735949* 0.032829	.1092325** 0.0340413
LTHS; HS	.0279784*** 0.0008181	.0265608*** 0.0008695	.0319228*** 0.0025819	.068504*** 0.0184974	.1004186*** 0.0164262
Both LTHS	.0448814*** 0.0009823	.0418564*** 0.001031	.0630014*** 0.0033994	0.0575045 0.0328492	.065782* 0.0303558
Household Characteristics					
Number of Adults	-.005947*** 0.0003466	-.0055395*** 0.0003594	-.0102866*** 0.001213	-.037216*** 0.0084118	-.0220647** 0.0083741
Number of Children	.0259849*** 0.0002162	.0245657*** 0.0002267	.0387332*** 0.0008236	.0362799*** 0.0061921	.0267215*** 0.0058169
Beale - Increasingly rural	.0035013*** 0.0001326	.0034667*** 0.0001379	.0035405*** 0.0004694	0.0003819 0.0029212	.0121807*** 0.0026644

Table 3.3 continued...

Disability	All	Different-Sex Married	Different-Sex Unmarried	Same-Sex Male	Same-Sex Female
(omitted: neither disabled)					
One disabled	.0068037***	.0064684***	.0074935**	.0369387**	-0.0196578
	0.000749	0.0007766	0.0027798	0.0115595	0.0167479
Both disabled	.0134998***	.0137912***	0.005398	-0.0065954	-0.0293469
	0.0011192	0.0011437	0.0047713	0.0242791	0.02272
Region					
(omitted: Midwest)					
Northeast	-.0040016***	-0.0016833	-.016674***	0.0127907	-.045127**
	0.000821	0.0008611	0.0027536	0.0148435	0.0149848
South	0.0013006	.0034896***	-.0121153***	-0.010131	-.0345237*
	0.0007376	0.0007771	0.0024418	0.0149082	0.0143524
West	.0072758***	.008664***	0.0004013	0.0161148	-0.0224173
	0.0006507	0.0006827	0.0022059	0.012794	0.011892
Observations	1,355,424	1,235,048	110,828	4,742	4,806
Notes: Author's calculation on ACS 2010 data.					

Table 3.4: Oaxaca-Blinder decomposition for poverty rates, gay men versus straight

	Straight Married versus Gay		Straight Unmarried versus Gay	
Total Poverty Rate Gap	-0.0206***		-0.109***	
	(0.00276)		(0.00305)	
	characteristics	returns	characteristics	returns
Portion Due To...	-0.0230***	0.00242	-0.0853***	-0.0233*
	(0.00585)	(0.00733)	(0.0116)	(0.0133)
Race	0.000195	1.13e-05	-0.00167	0.00603
	(0.00183)	(0.00276)	(0.00298)	(0.0130)
Ethnicity	-0.00372***	-0.00232	-0.00742**	0.0164
	(0.00144)	(0.0154)	(0.00298)	(0.0185)
English fluency	-0.00167	0.00159	-0.00337	-0.00189
	(0.00131)	(0.0109)	(0.00239)	(0.00910)
Employment - Extensive	4.76e-05	0.00742	-0.000569	-0.0336
	(0.00379)	(0.0523)	(0.00255)	(0.0499)
Employment - Intensive	-0.00786*	-0.0309	-0.00556*	0.169
	(0.00410)	(0.215)	(0.00288)	(0.208)
Age	0.0142***	-0.00642	-0.0140**	-0.0205
	(0.00371)	(0.0424)	(0.00590)	(0.0553)
Education	-0.0106***	0.00339	-0.0308***	-0.0112
	(0.00312)	(0.0265)	(0.00642)	(0.0331)
Disability	0.000178	-0.00104	0.000638*	0.00522
	(0.000404)	(0.00712)	(0.000355)	(0.00720)
Number of Adults	0.00731***	0.0947	0.00376***	-0.288
	(0.00255)	(0.643)	(0.00117)	(0.308)
Number of Children	-0.0185***	-0.000953	-0.0238***	-0.0137
	(0.00628)	(0.0112)	(0.00786)	(0.0265)
Ruralness	-0.00182	0.00206	-0.00233	-0.00484
	(0.00232)	(0.0134)	(0.00295)	(0.0271)
Region	-0.000798	-0.00251	-0.000203	0.0293
	(0.000896)	(0.0205)	(0.00106)	(0.0487)

Source: Author's calculation on ACS 2010 data. ***p<0.01, **p<0.05, *p<0.1

Table 3.5: Oaxaca-Blinder decomposition for poverty rates, lesbian versus straight

	Straight Married versus Lesbian		Straight Unmarried versus Lesbian	
Total Poverty Rate Gap	0.0219***		-0.0661***	
	(0.00365)		(0.00387)	
	characteristics	returns	characteristics	returns
Portion Due To...	-0.0155**	0.0375***	-0.106***	0.0400***
	(0.00645)	(0.00779)	(0.00811)	(0.0100)
Race	0.00139*	-0.0139	0.000739	0.00314
	(0.000843)	(0.0387)	(0.00161)	(0.00887)
Ethnicity	0.000148	-0.00151	-0.000991	0.00710
	(0.000597)	(0.0198)	(0.00205)	(0.0117)
English fluency	-0.00161*	0.00725	-0.00525**	0.00558
	(0.000898)	(0.0222)	(0.00210)	(0.00617)
Employment - Extensive	0.000482	-0.0710	1.13e-05	-0.0279
	(0.00233)	(0.180)	(0.00245)	(0.0235)
Employment - Intensive	-0.0181***	-0.696	-0.0208***	-0.209
	(0.00597)	(1.726)	(0.00365)	(0.139)
Age	0.0124***	-0.00611	-0.0319***	0.0278
	(0.00350)	(0.0898)	(0.00408)	(0.0503)
Education	-0.00674**	-0.0227	-0.0355***	0.00167
	(0.00267)	(0.0762)	(0.00613)	(0.0199)
Disability	0.000386*	-0.0477	-8.90e-06	-0.0110
	(0.000226)	(0.114)	(0.000280)	(0.00748)
Number of Adults	0.00378**	-0.896	0.00235***	-0.257*
	(0.00161)	(2.192)	(0.000872)	(0.152)
Number of Children	-0.00518***	0.00535	-0.0102***	-0.0119
	(0.00199)	(0.0432)	(0.00216)	(0.0109)
Ruralness	-0.00156**	0.0764	-0.00312***	0.0263
	(0.000780)	(0.197)	(0.00111)	(0.0235)
Region	-0.000981*	-0.182	-0.00148**	-0.0428
	(0.000503)	(0.458)	(0.000658)	(0.0359)

Source: Author's calculation on ACS 2010 data. ***p<0.01, **p<0.05, *p<0.1

APPENDIX A

APPENDIX TABLES AND FIGURES FOR CHAPTER 1

Table A1: Means of occupational categories by sexual orientation and family status

Occupational Category	Sexual Orientation/Marital Status			Lesbian Division: Earner Definition		Lesbian Division: Roster Definition	
	Married Straight (1)	Unmarried Straight (2)	Lesbian (3)	Primary (4)	Secondary (5)	Primary (6)	Secondary (7)
Management	9.44** (0.001)	7.39** (0.002)	13.43 (0.007)	15.27 (0.011)	11.64 (0.009)	15.26 (0.010)	11.40* (0.010)
Business Operations	3.18 (0.000)	2.71* (0.001)	3.62 (0.004)	3.80 (0.006)	3.46 (0.005)	3.14 (0.005)	4.16 (0.006)
Financial Specialists	3.38** (0.000)	2.10 (0.001)	2.31 (0.003)	3.39 (0.006)	1.35** (0.003)	2.37 (0.004)	2.25 (0.004)
Computer and Math	1.77** (0.000)	1.32** (0.001)	3.20 (0.003)	4.28 (0.006)	2.38** (0.004)	3.39 (0.005)	3.10 (0.005)
Engineering	0.65** (0.000)	0.61** (0.000)	1.58 (0.003)	1.66 (0.004)	1.59 (0.004)	1.69 (0.004)	1.46 (0.004)
Sciences	0.88* (0.000)	0.81* (0.001)	1.49 (0.002)	1.79 (0.004)	1.25 (0.003)	1.56 (0.003)	1.42 (0.003)
Social Services	2.41** (0.000)	2.13** (0.001)	4.39 (0.004)	4.37 (0.007)	4.56 (0.006)	4.30 (0.006)	4.49 (0.007)
Legal Work	1.40* (0.000)	1.11* (0.001)	1.90 (0.003)	3.04 (0.005)	0.97** (0.002)	2.16 (0.004)	1.62 (0.004)
Education	13.34** (0.001)	6.23** (0.002)	9.62 (0.006)	9.13 (0.008)	9.95 (0.008)	9.55 (0.008)	9.70 (0.009)
Media & Arts	1.57 (0.000)	1.78 (0.001)	1.99 (0.003)	1.72 (0.003)	2.28 (0.004)	2.00 (0.004)	1.97 (0.004)
Healthcare	11.07** (0.001)	7.11* (0.002)	8.27 (0.005)	10.70 (0.009)	6.38** (0.006)	7.77 (0.007)	8.82 (0.008)
Healthcare Support	3.70* (0.000)	5.72** (0.002)	3.07 (0.004)	2.62 (0.005)	3.60 (0.005)	2.65 (0.005)	3.53 (0.005)
Security & Protection	0.77** (0.000)	1.05** (0.001)	3.20 (0.004)	2.57 (0.004)	3.54 (0.006)	3.27 (0.006)	3.12 (0.005)
Food/Serving	3.80 (0.000)	9.86** (0.002)	3.84 (0.004)	3.87 (0.007)	3.78 (0.005)	4.01 (0.007)	3.66 (0.005)
Custodial	2.10 (0.000)	2.99* (0.001)	2.11 (0.003)	1.27 (0.004)	2.66* (0.005)	1.64 (0.004)	2.63 (0.005)
Personal Care	3.55* (0.000)	4.70** (0.001)	2.50 (0.003)	1.35 (0.003)	3.69** (0.006)	2.06 (0.004)	2.99 (0.005)
Sales	8.55 (0.001)	12.64** (0.002)	9.33 (0.006)	7.69 (0.008)	10.66* (0.010)	9.05 (0.009)	9.65 (0.009)
Office Administration	22.67** (0.001)	21.55** (0.003)	15.12 (0.008)	13.80 (0.011)	16.54* (0.011)	14.36 (0.010)	15.95 (0.011)
Farming	0.32** (0.000)	0.47** (0.000)	0.04 (0.000)	0.00 (0.000)	0.09 (0.001)	0.05 (0.001)	0.04 (0.000)
Construction	0.19* (0.000)	0.40 (0.000)	0.51 (0.001)	0.52 (0.002)	0.40 (0.001)	0.65 (0.002)	0.36 (0.001)
Extraction	0.01 (0.000)	0 (0.000)	0.13 (0.001)	0.14 (0.001)	0.12 (0.001)	0.12 (0.001)	0.14 (0.001)
Installation/Repair	0.25** (0.000)	0.34** (0.000)	1.16 (0.002)	0.89 (0.003)	1.47 (0.004)	1.32 (0.003)	0.98 (0.003)
Production	3.22* (0.000)	4.44 (0.001)	3.96 (0.004)	3.59 (0.006)	4.28 (0.006)	4.40 (0.007)	3.47 (0.006)
Transportation	1.71** (0.000)	2.45* (0.001)	3.12 (0.004)	2.30 (0.005)	3.37 (0.006)	3.33 (0.005)	2.89 (0.006)
Military	0.06 (0.000)	0.10 (0.000)	0.10 (0.001)	0.22 (0.002)	0.00 (0.000)	0.00 (0.000)	0.21 (0.002)

Notes: Differences in the means between lesbians and straight unmarried women are indicated by * ($p < .10$) or ** ($p < .01$). Errors in column summation due to rounding.

Table A2: OLS predicting log hourly wages with household roster classification of primary/secondary, lesbians versus straight married women

	(1)	(2)	(3)	(4)
Sample:	All	All	Full-Time Workers	Full-Time Workers
Lesbian Primary Position	0.042** (0.02)	0.005 (0.02)	0.046*** (0.02)	0.025 (0.02)
Lesbian Secondary Position	-0.010 (0.01)	-0.015 (0.02)	-0.012 (0.02)	-0.012 (0.02)
Mother 0-5		0.038*** (0.00)		0.043*** (0.00)
Mother 6-12		-0.030*** (0.00)		-0.010** (0.00)
Mother 13-17		-0.028*** (0.00)		-0.019*** (0.00)
Mother 18+		-0.025*** (0.00)		-0.032*** (0.00)
Lesbian Mother 0-5 - Primary		0.087 (0.07)		0.161** (0.07)
Lesbian Mother 6-12 - Primary		0.146** (0.06)		0.076 (0.07)
Lesbian Mother 13-17 - Primary		0.065 (0.08)		0.085 (0.07)
Lesbian Mother 18+ - Primary		0.000 (0.10)		-0.052 (0.11)
Lesbian Mother 0-5 - Secondary		-0.010 (0.05)		-0.020 (0.06)
Lesbian Mother 6-12 - Secondary		-0.020 (0.05)		0.002 (0.06)
Lesbian Mother 13-17 - Secondary		-0.005 (0.08)		0.016 (0.08)
Lesbian Mother 18+ - Secondary		-0.008 (0.08)		0.080 (0.08)
Usual Hours Worked		0.003*** (0.00)		
Constant	2.378*** (0.01)	2.252*** (0.01)	2.340*** (0.01)	2.345*** (0.01)
Observations	279398	279398	178870	178870
R-squared	0.341	0.345	0.378	0.379

Notes: Author's calculation on 2010 ACS data. Standard errors in parentheses. Results for occupation, race, ethnicity, region, metropolitan status, education, and potential experience not shown. Statistically significant results denominated by *** ($p < 0.01$), ** ($p < 0.05$), * ($p < 0.1$).

Table A3: OLS predicting log hourly wages with household roster classification of primary/secondary, lesbians versus straight unmarried women

	(1)	(2)	(3)	(4)
Sample:	All	All	Full-Time Workers	Full-Time Workers
Lesbian Primary Position	0.085*** (0.02)	0.052** (0.02)	0.106*** (0.02)	0.073*** (0.02)
Lesbian Secondary Position	0.029* (0.02)	0.024 (0.02)	0.043** (0.02)	0.029 (0.02)
Mother 0-5		-0.036*** (0.01)		-0.049*** (0.01)
Mother 6-12		-0.045*** (0.01)		-0.062*** (0.01)
Mother 13-17		0.008 (0.02)		0.010 (0.02)
Mother 18+		0.029* (0.02)		0.023 (0.02)
Lesbian Mother 0-5 - Primary		0.160** (0.07)		0.257*** (0.07)
Lesbian Mother 6-12 - Primary		0.162*** (0.06)		0.120* (0.07)
Lesbian Mother 13-17 - Primary		0.031 (0.09)		0.053 (0.08)
Lesbian Mother 18+ - Primary		-0.059 (0.10)		-0.114 (0.11)
Lesbian Mother 0-5 - Secondary		0.065 (0.06)		0.059 (0.06)
Lesbian Mother 6-12 - Secondary		0.012 (0.05)		0.068 (0.06)
Lesbian Mother 13-17 - Secondary		-0.047 (0.07)		-0.033 (0.07)
Lesbian Mother 18+ - Secondary		-0.068 (0.09)		0.035 (0.08)
Usual Hours Worked		0.000 (0.00)		
Constant	2.355*** (0.02)	2.344*** (0.03)	2.370*** (0.03)	2.372*** (0.03)
Observations	279398	279398	178870	178870
R-squared	0.370	0.371	0.392	0.394

Notes: Author's calculation on 2010 ACS data. Standard errors in parentheses. Results for occupation, race, ethnicity, region, metropolitan status, education, and potential experience not shown. Statistically significant results denominated by *** (p<0.01), ** (p<0.05), * (p<0.1).

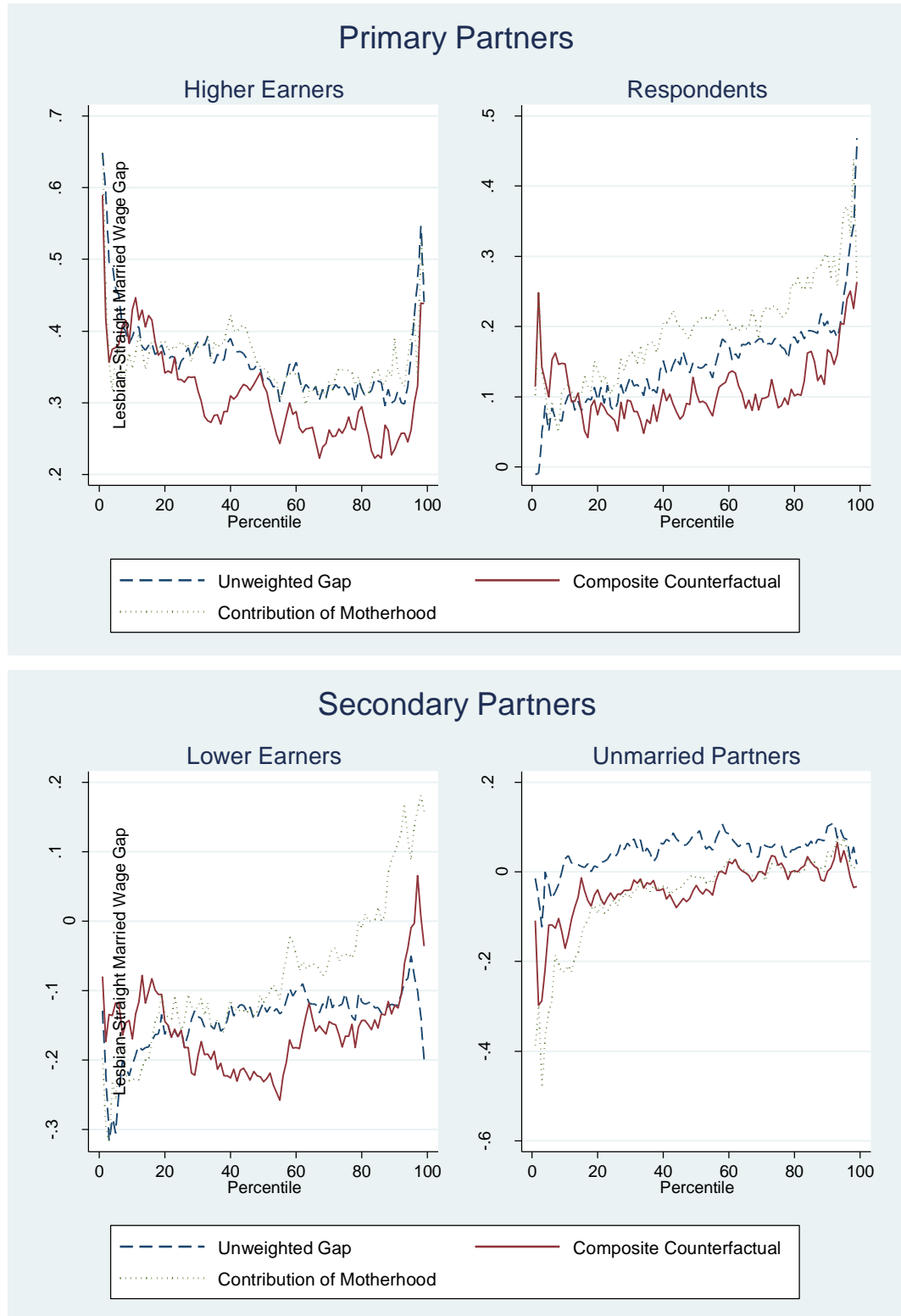


Figure A1: DFL analysis with IPUMS definition of mother: lesbian versus straight married women

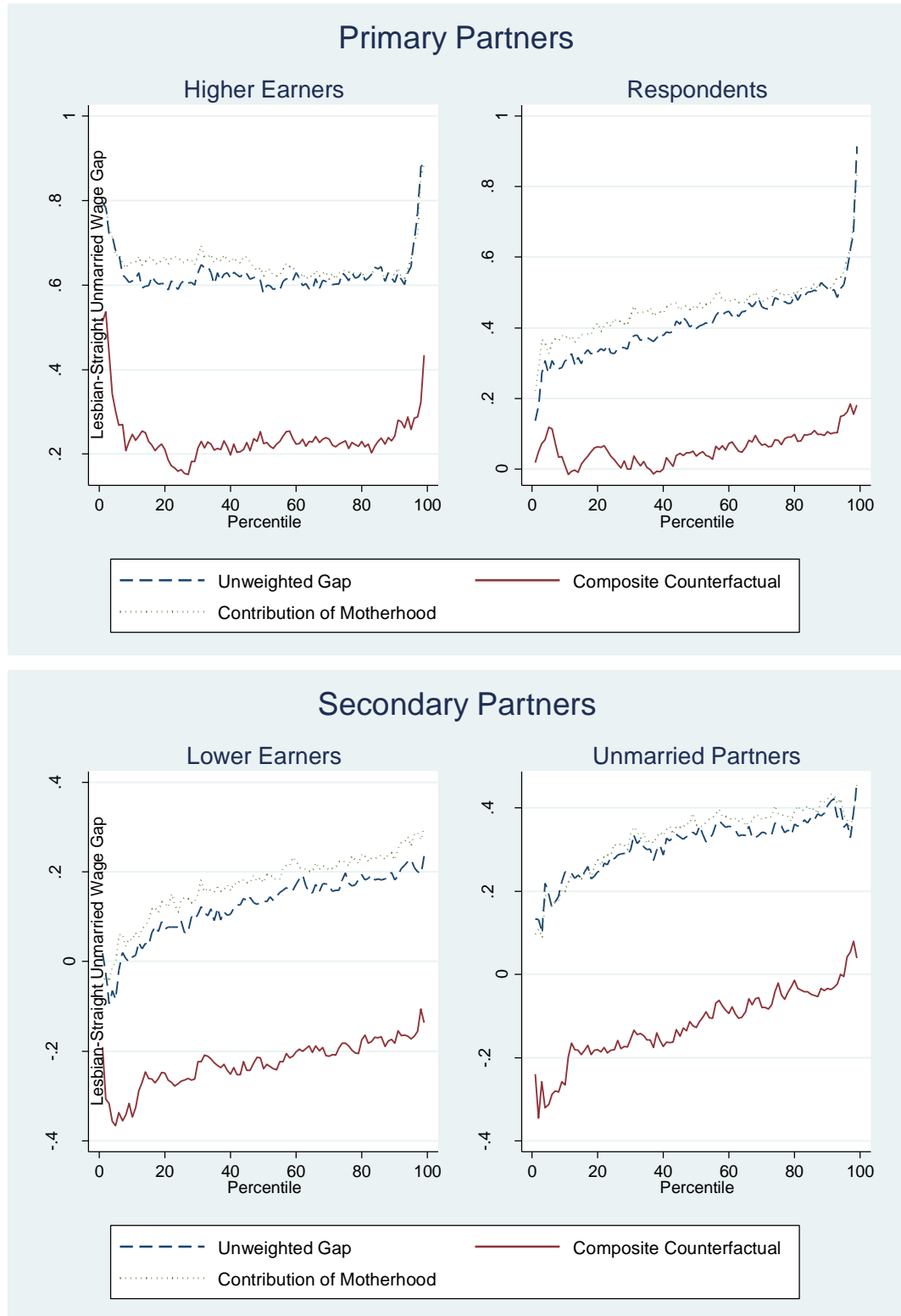


Figure A2: DFL analysis with IPUMS definition of mother: lesbian versus straight unmarried women

APPENDIX B

APPENDIX TABLES FOR CHAPTER 2

Table B1: Predicting Minutes Spent in Different Work for Different-Sex Couples

	Different-Sex Married	Different-Sex Unmarried	Different- Sex Married	Sex Unmarried	Different- Sex Married	Different-Sex Unmarried	Sex Married	Sex Unmarried
	Paid work		Household work		Care work		Supervisory Care work	
Female	-68.266***	-66.422***	38.490***	23.826***	37.654***	43.134***	82.416***	89.198***
	(3.905)	-15.138	(1.085)	(3.711)	(2.399)	(12.376)	(4.542)	(21.914)
marriage								
Rights	-6.708	-34.964*	1.528	-0.574	1.765	42.638**	-9.495*	79.694***
	(4.776)	-19.898	(1.233)	(3.771)	(2.851)	(16.602)	(5.366)	(29.943)
Rights * Lower								
Earner	-3.350	45.113	0.364	-3.601	2.876	8.164	-4.938	-82.842*
	(7.738)	-32.481	(2.136)	(7.159)	(4.800)	(36.126)	(8.891)	(45.377)
Household	-19.690***	-40.564***	3.034***	3.856	0.000	0.000	0.000	0.000
	(3.810)	-15.393	(0.988)	(2.954)	(.)	(.)	(.)	(.)
Lower Earner	-4.520**	-0.518	3.629***	2.168	-30.879***	-10.949	-34.484***	12.681
	(2.302)	-10.028	(0.745)	(2.358)	(3.727)	(19.113)	(7.470)	(50.373)
in Job	29.499***	31.76	-3.941**	-8.217	0.008***	-0.034***	-0.019***	-0.070***
	(6.463)	-27.307	(1.561)	(6.172)	(0.001)	(0.011)	(0.003)	(0.024)
Weekly								
Earnings	0.038***	0.044***	-0.004***	-0.002	10.287***	0.333	5.537	-9.773
	(0.003)	-0.015	(0.001)	(0.004)	(2.453)	(10.490)	(4.516)	(29.494)
in Couple	1.071	5.652	-2.390*	4.949	-1.402***	-1.571***	0.039	-0.303
	(4.681)	-18.246	(1.324)	(4.973)	(0.144)	(0.583)	(0.267)	(1.196)
Absolute Age	-1.299***	0.19	0.163***	0.655***	2.113	7.266	-1.481	11.677
	(0.166)	-0.602	(0.042)	(0.134)	(2.054)	(9.705)	(3.876)	(19.351)
in Couple	5.811*	-15.535	-0.616	-0.390	-1.641	23.677	-14.235	-10.697
	(3.344)	-13.529	(0.856)	(2.852)	(6.504)	(29.118)	(12.905)	(40.319)
Color -								
Interracial	15.847	-49.245	-2.181	3.540	1.887	-35.651	-0.034	50.331
	(12.224)	-34.206	(2.386)	(8.734)	(10.492)	(37.641)	(21.091)	(66.172)
Color * Lower								
Earner	-17.148	-3.224	-9.221**	-25.645**	-6.288	-28.080*	20.541	6.099
	(21.012)	-56.348	(3.751)	(11.843)	(5.932)	(16.119)	(13.604)	(39.135)
Interethnic	-8.068	-52.733	4.918	13.493**	4.516	26.292	-6.202	-92.131
	(11.581)	-37.469	(3.069)	(6.267)	(10.931)	(28.544)	(22.492)	(59.028)
Hispanic								
Interracial *								
Lower Earner	9.266	53.933	-6.307	-6.513	7.837***	33.122**	2.990	8.963
	(19.634)	-51.32	(5.459)	(17.763)	(2.328)	(14.837)	(4.141)	(18.864)
Lower								
Education	-9.166**	-18.104	3.013***	4.303	-15.662***	71.551	250.962***	190.762***
	(3.567)	-16.06	(0.986)	(4.243)	(5.966)	(45.922)	(16.213)	(64.363)
Interview on								
Holiday	-255.317***	-237.805***	5.071	-9.824	-6.535***	-4.433	252.359***	179.369***
	(10.790)	-42.733	(3.223)	(8.444)	(1.630)	(9.863)	(3.509)	(20.047)
Interview on								
Weekend	-331.489***	-287.812***	22.555***	18.705***	133.943***	123.706***	230.763***	228.115***
	(2.609)	-11.988	(0.805)	(3.111)	(6.446)	(24.652)	(11.948)	(65.780)
Constant	503.707***	450.437***	2.331	-9.908	160.637***	130.237***	160.637***	130.237***
	(10.744)	-32.756	(2.613)	(6.610)	(4.953)	(20.688)	(4.953)	(20.688)
Observations	43482	2383	43482	2383	23186	814	23186	814

Notes: Author's calculation on ATUS data 2003-2011 data. Standard errors in parentheses. *, **, *** denotes p<.01, .05, .10 respectively.

Table B2: Access to same-sex marriage or a marriage-like institution for same-sex couples, by state

State	Form of Legal Arrangement Available	Date Used in Analysis
California	Domestic partnerships since 10/14/2001; between 6/14/2008 and 11/4/2008 marriage was possible, domestic partnership again in place after that	10/14/2001
Colorado	Designated Beneficiary Agreement providing certain rights and responsibilities, including hospital visitation, medical decision making, and inheritance since 7/1/2009	7/1/2009
Connecticut	Civil union since 7/1/2009 and full marriage since 10/10/2008	10/1/2005
Delaware	Civil union since 1/1/2012 (not represented in 2003-2011 ATUS data)	1/1/2012
District of Columbia	Domestic partnership since 2002, extended on 4/4/2006 to almost completely equal rights; marriage since 3/3/2010	4/4/2006
Hawaii	Reciprocal beneficiary relationship giving basic rights since 1997; since 1/1/2012 civil unions	7/8/1997
Illinois	Civil union	6/1/2011
Iowa	Marriage	4/27/2009
Maine	Domestic partner registry	7/30/2004
Maryland	Domestic partners are entitled to certain rights since 7/1/2008; marriage since 1/1/2013	7/1/2008
Massachusetts	Marriage	5/17/2004
Nevada	Domestic partnership with equal rights	10/1/2009
New Hampshire	Civil union; marriage since 1/1/2010	1/1/2008
New Jersey	Civil union	2/19/2007
New York	Marriage	7/24/2011
Oregon	Domestic partnership	2/4/2008
Rhode Island	Civil union; domestic partnership with very few rights since 2002	7/1/2011
Vermont	Civil union; full marriage since 9/1/2009	7/1/2000
Washington	Domestic partnership; full marriage since 12/6/2012	7/22/2007
Wisconsin	Domestic partnership	8/3/2009

Notes: Author's compilation based on data from the Human Rights Campaign, April 2013. The 31 states not shown are coded as having no marriage or marriage-like institution available to same-sex couples.

Table B3: Minutes Spend Caring for Household Children versus Household Adults

	Different-Sex Married Men	Different-Sex Married Women	Different-Sex Unmarried Men	Different-Sex Unmarried Women	Same-Sex Men	Same-Sex Women
Time Spend in Household Children Care (Households with at least one child)	134.9	241.3	136.4	227.6	155.6	214.9
	(1.686)	(1.956)	(9.807)	(9.090)	(50.100)	(36.411)
Time Spent in Household Adult Care (Households with at least one other adult)	1.5	2.6	1.1	2.1	5.0	1.4
	(0.151)	(0.202)	(0.293)	(0.803)	(4.999)	(1.362)

Notes: Author's calculation on 2003-2011 ATUS data.

BIBLIOGRAPHY

- Abraham, Katharine G., Sarah M. Flood, Matthew Sobek, and Betsy Thorn. 2011. American Time Use Survey Data Extract System: Version 2.4 [Machine-readable database]. Maryland Population Research Center, University of Maryland, College Park, Maryland, and Minnesota Population Center, University of Minnesota, Minneapolis, Minnesota.
- Agarwal, Bina. 1997. "'Bargaining' and Gender Relations: Within and Beyond the Household." *Feminist Economics* 3(1): 1-51.
- Ahmed, Ali M., Lina Andersson and Mats Hammarstedt. 2011. "Inter- and Intra-Household Earnings Differentials among Homosexual and Heterosexual Couples." *British Journal of Industrial Relations* 49(S2): 258-278.
- Albelda, Randy, Robert Drago, and Steven Shulman. 1994. *Unlevel Playing Fields: Understanding Wage Inequality and Discrimination*. New York: McGraw-Hill.
- Albelda, Randy, M. V. Lee Badgett, Alyssa Schneebaum, and Gary Gates. 2009. "Poverty in the Lesbian, Gay, and Bisexual Community." The Williams Institute. Accessed 19 January 2013 at <http://williamsinstitute.law.ucla.edu/wp-content/uploads/Albelda-Badgett-Schneebaum-Gates-LGB-Poverty-Report-March-2009.pdf>
- Antecol, Heather and Michael D. Steinberger. 2013. "Labor Supply Differences between Married Heterosexual Women and Partnered Lesbians: A Semi-parametric Approach." *Economic Inquiry* 51(1): 783-805.
- Antecol, Heather, Anneke Jong, and Michael D. Steinberger. 2008. "Sexual Orientation Wage Gap: The Role of Occupational Sorting and Human Capital." *Industrial & Labor Relations Review* 61(4): 518-543.
- Artis, Julie E. and Eliza K. Pavalko. 2003. "Explaining the Decline in Women's Household Labor: Individual Change and Cohort Differences." *Journal of Marriage and Family* 65(3): 746-61.
- Badgett, M. V. Lee. 2001. *Money, Myths, and Change: The Economic Lives of Lesbians and Gay Men*. Chicago and London: The University of Chicago Press.
- Badgett, M. V. Lee. 1995a. "The Wage Effects of Sexual Orientation Discrimination." *Industrial and Labor Relations Review* 48(4): 726-39.
- Badgett, M. V. Lee. 1995b. "Gender, Sexuality, and Sexual Orientation: All in the Feminist Family?" *Feminist Economics* 1(1): 121-139.

- Badgett, M. V. Lee and Nancy Folbre. 1999. "Assigning Care: Gender Norms and Economic Outcomes." *International Labour Review* 138(3): 311-26.
- Badgett, M. V. Lee and Mary C. King. 1997. "Lesbian and Gay Occupational Strategies." In Amy Gluckman and Betsy Reed (Eds.) *Homo Economics: Capitalism, Community, and Lesbian and Gay Life*. New York and London: Routledge.
- Badgett, M. V. Lee and Alyssa Schneebaum. 2008. "Counting Same-Sex Couples in the Current Population Survey." Unpublished Manuscript.
- Baumle, Amanda K. 2009. "The Cost of Parenthood: Unraveling the Effects of Sexual Orientation and Gender on Income." *Social Science Quarterly* 90(4): 983-1002.
- Baumle, Amanda K., D'Lane Compton, and Dudley L. Poston, Jr. 2009. *Same-Sex Partners: The Social Demography of Sexual Orientation*. Albany: State University of New York Press.
- Becker, Gary. 1991. *A Treatise on the Family*. Enlarged Edition. Cambridge: Harvard University Press.
- Becker, Gary. 1985. "Human Capital, Effort, and the Sexual Division of Labor." *Journal of Labor Economics* 3(1): S33-S58.
- Becker, Gary. 1965. "A Theory of the Allocation of Time." *The Economic Journal* 75(299): 493-517.
- Bell, Carolyn Shaw. 1995. "What is Poverty?" *American Journal of Economics and Sociology* 54(2): 161-162.
- Berg, Nathan and Donald Lien. 2002. "Measuring the Effect of Sexual Orientation on Income: Evidence of Discrimination?" *Contemporary Economic Policy* 20(4): 394-414.
- Bianchi, Suzanne M., Melissa A. Milkie, Liana C. Sayer, and John P. Robinson. 2000. "Is Anyone Doing the Housework? Trends in the Gender Division of Household Labor." *Social Forces* 79(1): 191-228.
- Bittman, Michael, Paula England, Nancy Folbre, Liana Sayer, and George Metheson. 2003. "When Does Gender Trump Money? Bargaining and Time in Household Work." *American Journal of Sociology* 109(1): 186-214.
- Black, Dan A., Gary Gates, Seth G. Sanders, and Lowell J. Taylor. 2007b. "The Measurement of Unmarried Partner Same-Sex Couples in the 2000 U.S. Census." California Center for Population Research Paper CCPR-023-07.

- Black, Dan A., Gary Gates, Seth G. Sanders, and Lowell J. Taylor. 2000. "Demographics of the Gay and Lesbian Population in the United States: Evidence from Available Systematic Data Sources." *Demography* 37(2): 139-154.
- Black, Dan A., Hoda R. Makar, Seth G. Sanders, and Lowell J. Taylor. 2003. "The Earnings Effects of Sexual Orientation." *Industrial and Labor Relations Review* 56(3): 449-469.
- Black, Dan A., Seth G. Sanders, and Lowell J. Taylor. 2007a. "The Economics of Lesbian and Gay Families." *Journal of Economic Perspectives* 21(2): 53-70.
- Blandford, John M. 2003. "The Nexus of Sexual Orientation and Gender in the Determination of Earnings." *Industrial and Labor Relations Review* 56(4): 622-642.
- Blinder, Alan S. 1973. "Wage Discrimination: Reduced Form and Structural Estimates." *Journal of Human Resources* 8(4): 436-55.
- Blumstein, Philip and Pepper Schwartz. 1983. *American Couples: Money, Work, Sex*. New York: Morrow.
- Bobonis, Gustavo J. 2009. "Is the Allocation of Resources within the Household Efficient? New Evidence from a Randomized Experiment." *Journal of Political Economy* 117(3): 453-503.
- Bonke, Jens, Mette Deding, Mette Lausten, Leslie S. Stratton. 2008. "Intra-household Specialization in Housework in the United States and Denmark." *Social Science Quarterly* 89(4): 1023-1043.
- Braunstein, Elisa and Nancy Folbre. 2001. "To Honor and Obey: Efficiency, Inequality, and Patriarchal Property Rights." *Feminist Economics* 7(1): 25-44.
- Budig, Michelle J. and Melissa J. Hodges. 2010. "Differences in Disadvantage: Variation in the Motherhood Penalty across White Women's Earnings Distribution." *American Sociological Review* 75(5): 705-728.
- Carlson, Marcia and Sheldon Danzinger. 1999. "Cohabitation and the Measurement of Child Poverty." *Review of Income and Wealth* 45(2): 179-191.
- Carpenter, Christopher S. 2008. "Sexual Orientation, Work, and Income in Canada." *The Canadian Journal of Economics* 41(4): 1239-1261.
- Carpenter, Christopher S. 2007. "Self-Reported Sexual Orientation and Earnings: Evidence from California." *Industrial and Labor Relations Review* 58(2): 258-273.
- Carpenter, Christopher S. and Gary Gates. 2008. "Gay and Lesbian Partnership: Evidence from California." *Demography* 45(3): 573-90.

- Carrington, Christopher. 1999. *No Place Like Home: Relationships and Family Life Among Lesbians and Gay Men*. Chicago and London: University of Chicago Press.
- Chan, Raymond W., Risa C. Brooks, Barbara Raboy, and Charolette J. Patterson. 1998. "Division of Labor Among Lesbian and Heterosexual Parents: Associations With Children's Adjustment." *Journal of Family Psychology* 12(3): 402-419.
- Citro, Constance F. and Robert T. Michael, eds. 1995. *Measuring Poverty: A New Approach*. Panel on Poverty and Family Assistance: Concepts, Information Needs, and Measurement Methods, National Research Council. The National Academy Press.
- Clain, Suzanne Heller and Karen Leppel. 2001. "An Investigation into Sexual Orientation Discrimination as an Explanation for Wage Differences." *Applied Economics* 33(1):37-47.
- Coltrane, Scott. 2000. "Research on Household Labor: Modeling and Measuring the Social Embeddedness of Routine Family Work." *Journal of Marriage and Family* 62(4): 1208-33.
- Correll, Shelly J., Stephen Benard, and In Paik. 2007. "Getting a Job: Is There a Motherhood Penalty?" *American Journal of Sociology* 112(5), 1297-1339.
- Cushing-Daniels, Brendan and Tsz-Ying Yeung. 2009. "Wage Penalties and Sexual Orientation: An Update Using the General Social Survey." *Contemporary Economic Policy* 27(2):164-175.
- Dalmia, Sonia and Paul Sicilian. 2009. "Kids Cause Specialization: Evidence for Becker's Household Division of Labor Hypothesis." *International Advances in Economic Research* 14(4): 488-59.
- Daneshvary, Nasser, C. Jeffrey Waddoups, and Bradley S. Wimmer. 2009. "Previous Marriage and the Lesbian Wage Premium." *Industrial Relations* 48(3): 432-453.
- DiNardo, John, Nicole M. Fortin, and Thomas Lemieux. 1996. "Labor Market Institutions and the Distribution of Wages, 1973-1992: A Semiparametric Approach." *Econometrica* 64(5): 1001-1044.
- Elmslie, Bruce and Edinaldo Tebaldi. 2007. "Sexual Orientation and Labor Market Discrimination." *Journal of Labor Research* 28(3): 436-453.
- England, Paula and George Farkas. 1986. *Households, Employment, and Gender: A Social, Economic and Demographic View*. New York: Aldine de Gruyter.
- Folbre, Nancy. 1994. *Who Pays for the Kids? Gender and the Structures of Constraint*. New York: Routledge.

Folbre, Nancy. 1986. "Hearts and Spades: Paradigms of Household Economics." *World Development* 14(2): 245-255.

Fortin, Nicole, Thomas Lemieux, and Sergio Firpo. 2010. "Decomposition Methods in Economics." National Bureau of Economic Research Working Paper No. 16045, accessible at <http://www.nber.org/papers/w16045>.

Fuegen, Kathleen, Monica Biernat, Elizabeth Haines, and Kay Deaux. 2004. "Mothers and Fathers in the Workplace: How Gender and Parental Status Influence Judgments of Job-Related Competence." *Journal of Social Issues* 60(4), 737-754.

Gang, Ira N., Kunal Sen, and Myeong-Su Yun. 2008. "Poverty in Rural India: Caste and Tribe." *Review of Income and Wealth* 54(1): 50-70.

Gates, Gary J. and Jason Ost. 2004. *The Gay & Lesbian Atlas*. Washington, DC: The Urban Institute Press.

Gates, Gary J. and Michael D. Steinberger. 2009. "Same-Sex Unmarried Partner Couples in the American Community Survey: The Role of Misreporting, Miscoding, and Misallocation." Paper presented at the 2009 Annual Meeting of the Population Association of America. Detroit, MI.

Gelbach, Jonah B. (2009). "When Do Covariates Matter? And Which Ones, and How Much?" University of Arizona Department of Economics Working Paper, available at http://econ.arizona.edu/docs/Working_Papers/2009/Econ-WP-09-07.pdf.

Gerschuny, Jonathan. 2000. *Changing Times: Work and Leisure in Postindustrial Society*. Oxford and New York: Oxford University Press.

Giddings, Lisa. 2003. "But... Who Mows the Lawn? The Division of Labor in Same-Sex Households." In Karine S. Moe (Ed.) *Women, Family, and Work: Writings on the Economics of Gender*. Portland and Oxford: Blackwell Publishing.

Giddings, Lisa. 1998. "Political Economy and the Construction of Gender: The Example of Housework within Same-Sex Households." *Feminist Economics* 4(2): 97-106.

Giddings, Lisa, John Nunley, Alyssa Schneebaum, and Joachim Zietz. 2013. "Children, Age Cohort, and Household Specialization: A Comparison of Same-Sex and Different-Sex Couples." Revise and Resubmitted to *Demography*.

Haughton, Jonathan and Shahidur R. Khandker. 2009. *Handbook on Poverty and Inequality*. Washington, DC: The World Bank.

Hartmann, Heidi. 1981a. "The Family as the Locus of Gender, Class, and Political Struggle: The Example of Housework." *Signs* 6(3): 366-394.

Hartmann, Heidi. 1981b. "The Unhappy Marriage of Marxism and Feminism: Towards a More Progressive Union." In Lydia Sargent (Ed.) *Women and Revolution*. Boston: South End Press, pp. 1-42.

Hersch, Joni and Leslie S. Stratton. 1994. "Housework, Wages, and the Division of Housework Time for Employed Spouses." *American Economic Review* 84(2): 120-5.

Hochschild, Arlie and Anne Machung. 1989. *The Second Shift: Working Parents and the Revolution at Home*. New York: Viking.

Hodges, Melissa and Michelle Budig. 2010. "Who Gets the Daddy Bonus? Organizational Hegemonic Masculinity and the Impact of Fatherhood on Earnings." *Gender & Society* 24: 717-745.

Human Rights Campaign. 2013. "Marriage and State Law." <http://www.hrc.org/resources/entry/adoption-foster-care-agencies-state-law> last accessed 23 April 2013.

Iversen, Torben and Frances Rosenbluth. 2006. "The Political Economy of Gender: Explaining Cross-National Variation in the Gender Division of Labor and the Gender Voting Gap." *American Journal of Political Science* 50(1): 1-19.

Jepsen, Lisa K. 2007. "Comparing the Earnings of Cohabiting Lesbians, Cohabiting Heterosexual Women, and Married Women: Evidence from the 2000 Census." *Industrial Relations* 46(4): 699-727.

Jepsen, Christopher and Lisa K. Jepsen. 2012. "Earnings Differences in Same-sex Couples and Other Household Types." Presented at the workshop on Sexual Orientation Discrimination in the Labor Market, Paris, France June 20-22.

Jepsen, Lisa K. and Christopher A. Jepsen. 2006. "The Sexual Division of Labor within Households: Comparisons of Couples to Roommates." *Eastern Economic Journal* 32(2): 299-312.

Jepsen, Lisa K. and Christopher A. Jepsen. 2002. "An Empirical Analysis of the Matching Patterns of Same-Sex and Opposite-Sex Couples." *Demography* 29(3): 435-53.

Juster, F. Thomas, Hiromi Ono, and Frank P. Stafford. 2003. "An Assessment of Alternative Measures of Time Use." *Sociological Methodology* 33: 19-54.

Kakwani, Nanak and Jacques Silber (eds.). 2008. *Quantitative Approached to Multidimensional Poverty Measurement*. New York: Palgrave Macmillan.

Kennedy, Elizabeth Lapovsky and Madeline D. Davis. 1993. *Boots of Leather, Slippers of Gold: The History of a Lesbian Community*. New York: Routledge.

Klawitter, Marieka M. 2012. "Meta-analysis of the Effects of Sexual Orientation on Earnings." Paper presented at workshop *Sexual Orientation Discrimination in the Labor Market* in Paris, France, 21 June.

Klawitter, Marieka M. 1998. "Why Aren't More Economists Doing Research on Sexual Orientation?" *Feminist Economics* 4(2): 55-9.

Klawitter, Marieka M. and Victor Flatt. 1998. "The Effects of State and Local Antidiscrimination Policies on Earnings for Gays and Lesbians." *Journal of Policy Analysis and Management* 17(4): 658-686.

Kroska, Amy. 2004. "Divisions of Domestic Work: Revising and Expanding the Theoretical Explanations." *Journal of Family Issues* 25(7): 900-32.

Kurdek, Lawrence A. 2007. "The Allocation of Household Labor by Partners in Gay and Lesbian Couples." *Journal of Family Issues* 28(1): 132-48.

Kurdek, Lawrence A. 1993. "The Allocation of Household Labor in Gay, Lesbian, and Heterosexual Married Couples." *Journal of Sociological Issues* 49: 127-34.

Laumann, Edward O., John H. Gagnon, Robert T. Michael, and Stuart Michaels. 1994. *The Social Organization of Sexuality: Sexual Practices in the United States*. Chicago: The University of Chicago Press.

Leppel, Karen. 2009. "Labor Force Status and Sexual Orientation." *Economica* 76: 197-207.

Lundberg, Shelly and Elaina Rose. 2000. "Parenthood and the Earnings of Married Men and Women." *Labour Economics* 7(6): 689-710.

Michelson, William. 2005. *Time Use: Expanding the Explanatory Power of the Social Sciences*. Boulder, CO: Paradigm Publishers.

Moore, Mignon R. 2008. "Gendered Power Relations among Women: A Study of Household Decision Making in Black, Lesbian Stepfamilies." *American Sociological Review* 73, 2: 335-356.

Oaxaca, Ronald. 1973. "Male-Female Wage Differentials in Urban Labor Markets." *International Economic Review* 14(3): 693-709.

Oreffice, Sonia. 2012. "Sexual Orientation and Matching: Penalties, Trade-Offs, and Sorting in Gay and Lesbian Couples." Presented at the workshop on Sexual Orientation Discrimination in the Labor Market, Paris, France June 20-22.

Oreffice, Sonia. 2011. "Sexual orientation and household decision making: Same-sex couples' balance of power and labor supply choices." *Labour Economics* 18(2): 145-158.

Oreffice, Sonia. 2007. "Did the Legalization of Abortion Increase Women's Household Bargaining Power? Evidence from Labor Supply." *Review of Economics of the Household* 5(2): 181-207.

Patterson, Charlotte J. 2000. "Family Relationships of Lesbians and Gay Men." *Journal of Marriage and the Family* 62(4): 1052-69.

Patterson, Charlotte J. 1995. "Families of the Lesbian Baby Boom: Parents' Division of Labor and Children's Adjustment." *Developmental Psychology* 31(1): 115-123.

Patterson, Charlotte J., Erin L. Sutfin, and Megan Fulcher. 2004. "Division of Labor Among Lesbian and Heterosexual Parenting Couples: Correlates of Specialized versus Shared Patterns." *Journal of Adult Development* 11(3): 179-189.

Peplau, Letitia Anne and Adam Fingerhut. 2004. "The Paradox of the Lesbian Worker." *Journal of Social Issues* 60(4): 719-735.

Peplau, Letitia Anne. 1991. "Lesbian and Gay Relationships," in *Homosexuality: Research Implications for Public Policy*, pp. 177-96. Newbury Park, CA: Sage.

Peplau, Letitia Anne and Leah R. Spalding. 2000. "The Close Relationships of Lesbians, Gay Men, and Bisexuals." In *Close Relationships: A Sourcebook*, pp. 271-75. California, London, and New Delhi: Sage Publications.

Press, Julie E. and Eleanor Townsley. 1998. "Wives' and Husbands' Housework Reporting: Gender, Class, and Social Desirability." *Gender & Society* 12(2): 188-218.

Prokos, Anastasia H. and Jennifer Reid Keene. 2010. "Poverty Among Cohabiting Gay and Lesbian, and Married and Cohabiting Heterosexual Families." *Journal of Family Issues* 31(7): 934-959.

Quillian, Lincoln. 2012. "Segregation and Poverty Concentration: The Role of Three Segregations." *American Sociological Review* 77(3): 354-379.

Robinson, John P. and Godbey, Geoffrey. 1997. *Time for Life: The Surprising Ways Americans Use Their Time*. University Park: Penn State University Press.

Rosenfeld, Michael J. and Byung-Soo Kim. 2005. "The independence of young adults and the rise of interracial and same-sex unions." *American Sociological Review* 70(4): 541-562.

Ross, Catherine E. 1987. "The Division of Labor at Home." *Social Forces* 65(3): 816-833.

Rothenberg, Jessica Z. and Daniel S. Gardner. 2011. "Protecting Older Workers: The Failure of the Age Discrimination in Employment Act of 1967." *Journal of Sociology and Social Welfare* 38(1): 9-30.

Ruggles, Patricia. 1990. *Drawing the Line: Alternative Poverty Measures and Their Implications for Public Policy*. Washington, D.C.: Urban Institute Press.

Ruggles, Steven, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek. Integrated Public Use Microdata Series: Version 5.0 [Machine-readable database]. Minneapolis: University of Minnesota, 2010.

Schiller, Bradley R. 2004. *The Economics of Poverty and Discrimination*. 9th ed. New Jersey: Pearson Prentice Hall.

Schwartz, Christine R. and Nikki L. Graf. 2009. "Assortative mating among same-sex and different-sex couples in the United States, 1990-2000." *Demographic Research* 21: 843-878.

Short, Kathleen. 2011. "The Research Supplemental Poverty Measure: 2011." Current Population Reports P60-244. <http://www.census.gov/prod/2012pubs/p60-244.pdf>

Solomon, Sondra E., Esther D. Rothblum, and Kimberly F. Balsam. 2005. "Money, Housework, Sex, and Conflict: Same-Sex Couples in Civil Unions, Those Not in Civil Unions, and Heterosexual Married Siblings." *Sex Roles* 25(9/10): 561-75.

Stutzer, Alois and Bruno S. Frey. 2005. "Does marriage make people happy, or do happy people get married?" IZA Discussion papers, No. 1811. <http://hdl.handle.net/10419/33531>

Tebaldi, Edinaldo and Bruce Elmslie. 2006. "Sexual Orientation and Labor Supply." *Applied Economics* 38: 549-562.

Thorne, Barrie. 1993. *Gender Play: Boys and Girls in School*. New Brunswick: Rutgers University Press.

Wagle, Udaya. 2008. *Multidimensional Poverty Measurement: Concepts and Applications*. New York: Springer.

Weichselbaumer, Doris. 2003. "Sexual Orientation Discrimination in Hiring." *Labour Economics* 10(6): 629-642.

Weston, Kath. 1991. *Families We Choose: Lesbians, Gays, Kinship*. New York: Columbia University Press.

Woolley, Frances R. and Judith Marshall. 1994. "Measuring Inequality within the Household." *Review of Income and Wealth* 40(4): 415-431.

Yun, Myeong-Su. 2004. "Decomposing differences in the first moment." *Economics Letters* 82: 275-280.